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CLASS OF '47 — HERE'S YOUR FUTURE

also Dr. Martin Gumpert's

YOUR CHANCES FOR A LONGER LIFE

Norman R. Atwood

'47

the Magazine of the Year • JUNE 1947 • Vol. I, No. 4

America's Contributor-Owned Magazine

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'47 does not condense, but the Lombard Jones sketches above and left tell the story of this issue in a pen-line. The rocket to Venus is easy to recognize, and so is the supersquid, page 12. The family argument high-lights Earnest Hooton's article on children, and the man on the scaffold is trying to buck the housing shortage (see page 103). There are two men with beards—a fraction of a mile long—one refers to Gropper's Rip Van Winkle (page 83) and the other to your chances of living a century (page 2). There is also a horse with a headless rider (see page 81).

LOOK FOR the July issue of '47 on your newsstands June 4. Clifton Fadiman will introduce the contributors... who will include Stuart Chase with new "Concepts for an Atomic Age"... Vincent McHugh... Roark Bradford... and such exciting subjects as a new treatment for high blood pressure and J. D. Ratcliff's challenging revelation that the planet is not producing enough food to feed its population.

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Life With Authors

By Russel Crouse

Herewith a new issue of '47 and six contributors brought to the very peak of man's ability to express himself by several million years of heredity and environment:

Dr. Martin Gumpert won his ear at Heidelberg before coming to America to practice medicine and the literary arts. He wrote the widely-read *You Are Younger Than You Think*. Now he says you are going to be older than you think; it will soon be possible to live 100 or 120 years. It's stimulating and a little frightening. For instance, readers who have just been sentenced to life imprisonment are advised not to read this brilliant contribution.

Stuart Cloete, however, takes us backward. He writes charmingly of Martinique and the evidences of the life of a departed century on the island that blazed into world prominence in the volcanic light of Mt. Pelée. Striking an average should bring one to about 6:15 on May 7, 1947, which is the sort of thing that makes '47 timely. Mr. Cloete, a South African, is known chiefly for his fiction but his latest book, *The Third Way*, is earnestly factual.

To say **Christopher Morley** needs no introduction is to say he won't get one from '47. If you do not know that he is a novelist, a poet, an essayist, a dramatist, and long one of America's outstanding literary figures you obviously cannot read and if you cannot read what are you doing

with a copy of '47? In *Time of Life* he combines sex and garden vegetables, which even Luther Burbank couldn't do.

S. J. Perelman wasn't born. He was discovered under a lettuce leaf in a Waldorf salad at the Mermaid Tavern. How he got to New York, where he has spent most of his life between magazine covers, is his own secret. He is also a playwright and if you have been thinking he is all wit and no bite read *Two years Down The Drain*, the story of a Broadway production that came to no good end, and find out what nice sharp teeth he has.

Clifton Fadiman proposes that Presidential candidates submit to intelligence tests. This, of course, could lead to nihilism, but Mr. Fadiman is not a nihilist. He is perhaps our most pungent literary critic and the gay interlocutor of *Information Please!*

Earnest Hooton's anthropological observations have never been marked by optimism. This time his theory is that many a promising child has broken his promise because his parents were unmindful of the lessons of heredity. He believes that "the most important study of a parent's lifetime is that of his own children." This would make things easier for Mr. Hooton at Harvard, where he is a professor of anthropology, but if all little boys and girls turned out just right it would deprive us of Mr. Hooton's fascinating books about why they didn't.

A Hundred Years To Live

"Many scientists now agree that the natural lifespan of man is around 120 years." The distinguished author of "You Are Younger Than You Think" challenges us to make man's added years a blessing, not a burden.

By Martin Gumpert

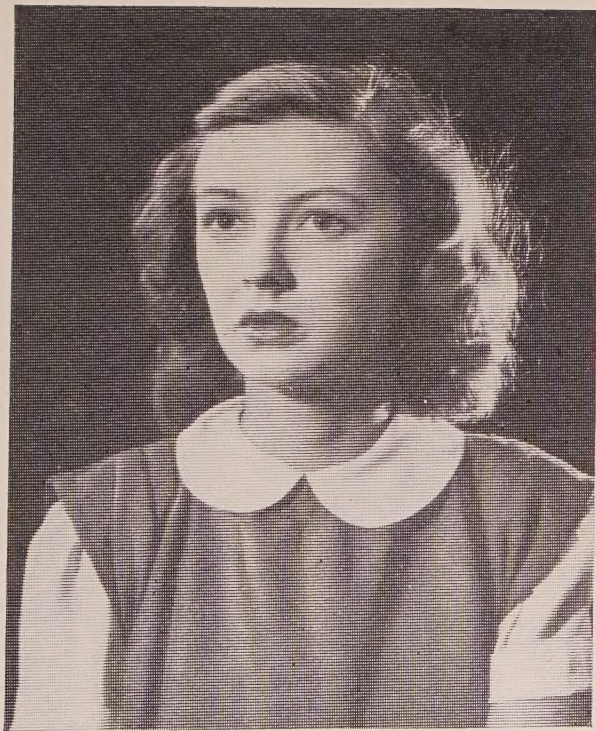
IN 1947, for the first time in history, a large group of our population—white American females—will have exceeded the Biblical three score and ten limit of the human lifespan. The official figures of the United States Bureau of Census have not yet been published, but there can be no doubt that the life expectancy of 70 will have been passed in 1947. What in early times represented the extreme limit of longevity will be in modern times the average life expectancy. This increase in average length of life is of far-reaching importance. It creates an entirely unprecedented historic situation, full of potential misery or potential happiness—not unlike the rise of atomic science.

Dr. Aldred Scott Warthin, a distinguished American pathologist, wrote in 1929 a widely discussed scientific study: *Old Age, The Major Involution*. In this book he stated: "If the average age of longevity be raised to 60 years,

this will probably be as high as the rate can be raised. That it can be raised to 65 or 75 years is impossible on the face of it." In the short space of 15 years the "impossible" has happened. In 1944, for the first time in this country, the general average life expectation at birth exceeded 65 years. This is almost 16 years greater than it was in 1900.

Since women, on the whole, live longer than men in our civilization, the 1944 figure for white females was 68.95 years, almost exactly one year short of 70. From 1943 to 1944, in a single year, the longevity of white females had advanced two thirds of a year. This peak of longevity was reached in the midst of the greatest catastrophe the world has ever seen. But in contrast to the experience of past history, war has not been able this time to retard the rapid progress of longevity.

What does this irresistible movement towards a longer life



LISA LARSEN

A child of 1947 has a longer life to look forward to than any other human being in the whole history of the race.

mean? One of the most exciting publications of this country is the *Statistical Bulletin* of the Metropolitan Life Insurance Company. There you will learn that, on an average, a person now 20 years of age has as many years of life remaining as the newborn child had in 1900. Even more striking: only three quarters of the babies of 1900 attained 25. Now, three quarters of them will reach 57.

Infants Who Survive

A GREAT deal of the increase in life expectancy is due to the spectacular improvement of the mortality rate for infants. In 1776, for instance, the Dublin Foundling Asylum registered 10,272 children, of whom just 45 were able to leave the asylum alive. Coming down to modern times: in 1944, the mortality rate for the first year of life in this country was less than one third of the figure for 1900; at age one, it was only one ninth of that in 1900; and at ages four and five the fraction was one sixth.

But it is significant that the improvement in life expectancy has been restricted recently to the early years of life. It has extended into the higher ages as well. At 40 the figure for the population as a whole was 3.5 years more than in 1900 (31.65 years); even at the age of 65 there was a gain of 1.25 years. However, most of the medical achievements which have contributed to a lowering of human mortality are based on the fight against infectious diseases or nutritional deficiencies. They therefore have benefited the age of childhood.

Very little has so far been accomplished against the chronic diseases of later age. But the skept-

tical or negative attitude of medicine towards old age is vanishing rapidly. And we have recently seen in this country the rise of a new field of medical research—geriatrics, entirely devoted to the process of aging and to the study of old-age diseases. We can therefore count on a further acceleration of life expectancy as medicine extends its efforts at life-saving from the younger to the older age groups.

When Men Live Longer

THE fact that our chances for survival are steadily improving might be a source of pleasant meditation, since few of us like to think of ourselves as no longer alive. However, it is a startling and vital social problem. The change in the national longevity has had an enormous influence on our relative age groups. In 1900, only 17 per cent of the population of the United States were 45 or over. In 1940, 26.5 per cent were over 45; and it is estimated that in 1980, more than 40.4 per cent will be older than 45. In the decade of 1930 to 1940 there was an increase of 35 per cent in the old-age group as compared with an increase of 7.2 per cent of the total population. There will be more than 21,000,000 over 65 in this country and in this century; we will have at least 60,000,000 people 45 years and over by 1980.

The Meaning of Survival

WHAT do these figures mean? For the first time in history, the basic structure of human society is threatened by changes that will continue to operate at an accelerated tempo. Our society rests on a static rhythm of life and death

as expressed by birth rate, death rate, and average life span. It rests on a static balance between successive generations and age groups, shown in the growth and decline of our biological functions as expressed by infancy, childhood, adolescence, maturity, senescence. Our social order relies on this stable relationship in the same manner as our life is bound to the static changes of day and night, summer and winter.

The change that has occurred—almost imperceptibly—implies a profound revolution in deep-rooted standards of life, of thought, of social and economic conditions, of family bonds, which may crack or rebuild the foundations of our civilization. We shall have to face this revolution. Trends of the human race cannot be reversed, despite conservative minds.

The old people are already here, living among us. And our own generation, our children and our children's children will increase this tide of the long-lived.

None of us knows what life will be like in a society of elderly people, because we lack experience. If we draw our conclusions from the life that an elderly person can expect to lead today, it may well be an inferno. If, on the other hand, we make a fundamental change in social attitudes, it may be a more mature, a more worthwhile life.

A Planetary Population Policy

ONE of these basic social changes will undoubtedly—aside from all current ideologies and dogmas—affect labor. We will have to learn that to be alive and to make a living are not the same



thing. We will have to teach coming generations how to keep active and at the same time reduce gainful work. Labor-saving devices and population changes which we can safely foresee will result in a surplus of at least 30,000,000 workers in this country by 1980. One of the few ways to fight this "menace" and its bad human and social consequences will be a substantial reduction of working hours and the development of new methods of spending this "liberated time."

The situation is still more complicated by the uneven pace in which different nations participate in the blessings and curses of longevity. We forget too easily that history, basically, is nothing but a part of biology. Biological changes—differences in the distribution of people, as of natural goods—are behind political catastrophes. Within our own nation the life expectancy of colored people differs greatly from that of white people. It was, in 1944, about the same as it was for white persons in 1919. But the general tendency of the American Negro population is to come up to white standards by larger and quicker gains.

Internationally, New Zealand and Australia lead the longevity race. The United States is a close third (64.82 in 1942). Life expectancy in Italy in 1942 was 55, in Japan 48, in British India 27.

If we want One World, we need one population policy for this world, otherwise it will explode under the impact of unbearable tensions. It took mankind many thousands of years to increase to a population of 850,000,000 in 1840. One more century, and the world population had doubled. Indeed, Europe's population almost tripled during the 19th Century, advancing from 180 to 470 million people. Such anarchic and irregular multiplication of life must end either in wars or in a planned economy of human life—without which the human species will not be able to survive.

Life Span: 120 Years

THE explosive power of human progress in our time seems almost too much for the human brain. We shall either destroy each other or produce unimaginable means of better living. We shall either suffocate under the cancerous growth of overpopulation and senility or develop a more mature and more creative existence for the men and women of tomorrow.

Most people reflecting on their own life seem to agree that generally it is too short. Shaw, on the occasion of his 90th birthday, proclaimed that he felt just mature enough to be the office boy of a foreign Secretary of State. Cicero, in his famous sermon on Old Age, which is still the best comment on the subject, says: "Length of life: Good Gods! What is there, in the utmost ex-

tent of human duration, that can properly be called *long*, even if our days should prove as numerous as those of . . . the king . . . who reigned, as history tells us, 80 years, and lived to be 120."

Many scientists now agree that the natural life span of man is around 120 years. Today, this is the utter limit, reached only in extremely rare cases. Tomorrow it may be the average and it may be possible to attain such age in physical and mental health. It is an exciting prospect. Up until now most species of living beings have seemed to be subject to a rigid and unchanging age rate and life span: a few hours, perhaps, for certain insects; a hundred years or more for crocodiles. But Dr. C. D. McCay and his associates, of Cornell University, have recently shown, in fascinating experiments, that a high quality diet, adequate in all essentials, but with restriction of caloric intake, can prolong the life of rats by 50 per cent.

Certainly there are life-prolonging influences other than nutrition, but it is exceedingly interesting to learn that by this factor alone, a life span may be so greatly extended. It might even be possible, in some foreseeable future, to change the specific age rate of living beings.

Animal and clinical experiments on human beings are now under way in this country to check the claims of the late Dr. A. A. Bogomolets, who expected a prolonged life span from a serum-stimulation of the connective tissue. The trend towards a longer life is undeniable. But to extend life, to breed and sustain more people merely in order to kill more people would only in-

crease the load of human guilt and misery. What good, then, would it do us to live longer? It is worth-while only if living can be made more worth-while. When the majority of us can expect a longer life, the planning of life will have to change from our childhood on.

No SPECTACULAR changes would be necessary. There is a small minority of outstanding individuals who at all times have been able to win the fight against the dreaded qualities which make old age despised.

Just as I began this article, I received the latest annual report of the Historical Library of Yale University's School of Medicine. There I found: "One of the most thrilling acquisitions of the year is a new book—a great biography of the little-known 16th Century physician, Jean Fernel. . . . This remarkable book comes from the pen of Sir Charles Sherrington. Since his retirement from the chair of physiology at Oxford in 1936, Sir Charles has worked industriously on Fernel. . . . Robert Bridges published his *Testament of Beauty* when he was 86 and the book was a sensation in the literary world. Sir Charles, now in his 87th year, has thus surpassed the record of his good friend, and there can surely be few parallels in the history of our literature of a man achieving a scholarly objective of this quality after retiring late in life from a career of investigation."

The example of Charles Sherrington—amazing to people who picture an aged person as a pitiful candidate for asylum or grave—is not unusual at all. One could compile long lists of persons in all spheres of life who have started the triumphal course of fame at an age when the average person retires from business. There is no doubt that very few of us achieve the state of mental maturity. Most of us stop learning before we start thinking, and stop thinking long before we stop living. Wisdom is the rare harvest of a creative old age.

There is no prescription that promises longevity. Insurance against death, or retirement (retirement from life) is a vicious dream or just a clever business.

A purpose, a goal that has not yet been reached, is the strongest motivation for a long life. Uselessness and resignation are the physical and mental equivalents of death. Living must be an aggressive job.

The reality of longevity in our time is a tremendous challenge to the spiritual, political, and scientific forces of the human mind. Longevity poses an intellectual task and requires an effort of human engineering far greater than we may imagine.

It is up to us whether the inevitable world of the aged will be a boon or a disaster. And we had better start working soon, because what is at stake is our own future, our own old age—yours and mine.



INTELLIGENCE TESTS

for Candidates



TRUMAN

Presidential aspirants should reveal their intellectual ability, says Clifton Fadiman

'47

Sirs:

Through the courtesy of your pages, I beg leave to submit a suggestion bearing upon the imminent presidential campaign. Were the suggestion to be adopted, it would permit the candidates for the two major nominations to present themselves before the electorate with even more candor and honesty than they have displayed in their distinguished careers to date.

Briefly, I propose that each candidate, immediately after throwing his hat in the ring, submit himself to an intelligence test, to be administered by competent psychologists. (I would suggest the Wechsler-Bellevue Adult Intelligence Test which, in addition to other advantages, makes proper allowance for the deterioration of intelligence with old age.) As soon as the results of the test are established, they should be made known to the citizenry through the conventional channels.

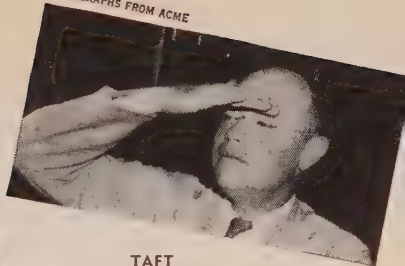
I hasten to add that the candidates have nothing to fear from such a test. For one thing, it does not measure either the number or the social value of any political ideas they may have. To reassure them further I may state that it does not measure the depth and range of their information, either; so that a candidate, for example, innocent of any knowledge of history, philosophy, or science need not hesitate to take such a test, which grades merely the mechanical efficiency of the mind.

BRICKER

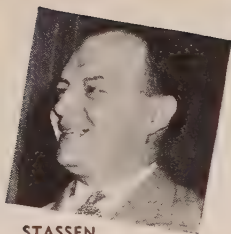


Not only have the candidates nothing to fear from the test: they have everything to gain. Should

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the candidate score well above the I.Q. of the average citizen, he may justly lay claim to superior mental power. Should his score prove equal to that of the average citizen, he may justly claim that he is a man of the people. Should his score be well below that of the average citizen, he may justly claim that to elect him is in accordance with sound precedent, for we have often freely chosen for high office, and indeed for the highest office, persons whose mental capacities were not equal to any challenge greater than that presented by a game of stud poker.

EQUALLY clear is the advantage the voter will derive from this procedure, for it enables his wishes to express themselves more democratically. Proper attention to the results of the tests would prevent the voter from innocently choosing a candidate who does not respond to his real desire. Many voters whose deep, legitimate preference is for a president of low mental power occasionally find themselves basely deceived into electing one of high mental power. This happened three times in the case of the late Mr. Roosevelt. It is true that at the moment it looks as though in 1948 we will be permitted to correct this gross miscarriage of the popular will. But it should be borne in mind that we cannot afford to take many such chances.

In the same way those voters who prefer average mental capacity in their presidents will be provided with the information that will enable them to select and support the appropriate can-



DEWEY

didate in either party; just as that somewhat eccentric and by no means entirely trustworthy minority who believe that leaders should be brainier than their followers will have an opportunity to recognize *their* man, in case the tests should disclose such a one.

HERE, however, we should call a halt. It is well known that there are certain tests—such as the Rorschach—which aim to throw light, not on the subject's mental capacity, but rather on his emotional drives and obsessions. Such tests the candidate should refuse to undergo. For what would be the consequence of taking them? They might perhaps indicate whether the candidate is just and benevolent or, on the contrary, filled with general or specific hatreds; whether he is emotionally stable or dominated by fears of individuals, classes, races, or nations; whether or not his judgment is subject to perturbations arising out of childhood experiences or personal frustrations; whether he is sexually confident and mature, or, as with most potential dictators, a mass of compensating power drives.

In refusing to submit to such a test the candidate would be well within his rights. The grounds of the refusal are unassailable: the results of the test would be inconsequential. In support of this view the candidate could with propriety adduce the political instinct of the great American voting public. We have never found it necessary to inquire into a candidate's character along the lines laid down in the preceding paragraph—and, God willing, we never shall.

As for the suggestion some extremists might make—that we should administer to prospective candidates certain drugs, under whose influence the subject is compelled to utter the truth—this can be dismissed without further consideration. Such drugs are properly administered to criminals, who can do us harm, which is hardly the case, as history shows, with politicians.

Respectfully,

Clifton Fadiman



"I'll be frank with you—the cellar tends towards dampness."

SQUIDS AND SUPERSQUIDS

*Some squids blush, some are tough enough
to crack your skull; but most of them are
just nice, normal Cephalopoda trying to
make deep-sea living as pleasant as possible
for themselves*

By Ivan T. Sanderson

THE gigantic devilfish belongs to a wonderful group of animals which have beaks like parrots, walk on their heads, and swim backwards by jet propulsion, which they invented 350,000,000 years ago. Some have umbrellas, others button up their mantles, and a few carry lanterns.

These are the lowliest animals that have backbones. They also have incredible eyes, and they are the fastest things in the sea. There are over 400 kinds of them, the smallest only three quarters of an inch long, the largest measuring more than 50 feet. Yet they are only shellfish like the ubiquitous oyster.

These astonishing creatures are known as the "Head-footed-ones" or *Cephalopoda*. They constitute one of the five great groups of shellfish. They are the octopuses, cuttlefish, and squids.

THE speed attained by squids is extraordinary. Some little pencil-shaped species can dart through

the water by their jet propulsion as fast as flies can whiz through the air. When they leap from the water they sometimes flash by faster than the eye can follow. Some of the giants have been estimated to travel over the surface of the ocean faster than the fastest speedboat.

For their size, their strength is prodigious. An octopus with a body only six inches long can anchor a man to its rocky lair with only two arms. The jet of water from the funnel of a giant squid once ploughed a channel two feet deep and over 30 feet long in the sand of the beach on which it was stranded.

The cunning of the octopus is proverbial but the real extent of its intelligence is seldom appreciated. Very few animals, except men, use tools. However, one expert who spent a great deal of time watching octopuses in captivity, describes an act on the part of one of these creatures that showed such a use.



An ancient mariner's nightmare? Or was it just an outsize Cephalopod?

This octopus was seen to pick up a small rock and hold it with the tip of one of its tentacles. It then lay down by a clam-shaped shell and glared at it balefully for over an hour. The shell was closed tight, in such a way that it could be opened only by a man with a knife.

The octopus waited, rock poised on high. At length the shell began to open. Still the octopus waited, motionless. As soon as the shell was gaping wide, the octopus popped the rock inside, so that the valves couldn't shut. Then he pounced on it, pulled the clam out of its shell, and ate it.

ALL living creatures are divided into two classes, according to whether or not they possess a backbone. The shell-fish belong to the class that has none, and yet the squids have a structure in their heads that is like a skull and a flexible backbone shaped like a straight quill pen. In addition, cephalopods have eyes as

good as, if not better in some respects than, our own. Some of them have a large lens, a cornea, a curved retina, and eyelids. They may even be supplied with adjacent light organs—as if we were born with ever-ready flashlights built into our cheeks.

THE rest of the animals' anatomy is equally wonderful. They possess ink sacs which are connected with the excretory system. These sacs consist of a manufacturing compartment and a storage vat. The ink, which is an intense dye and has been known to us since ancient times as sepia, is squirted as a cloud screen between the animal and its enemies. This is done by means of a nozzle which projects forward under the head of the animal and opens inward into what is called the mantle cavity. The covering of the cephalopods is like a cloak. Imagine this mantle hanging down on either side, then gathered together in front from the tip of the tail, up the

tummy, to the neck. Around the neck there is a collar which leaves an opening from the outside just as your coat does. The squid's funnel sticks up in front and looks as if you had pushed the nozzle of a firehose down inside your coat.

The octopus or squid swims on its tummy and pumps water into its body cavity through the collar. It then closes the collar by means of a ring of muscles. Then suddenly it squeezes its body violently. The water is forced out of the funnel and in this way the animal is propelled backwards.

This combination of physical and mental attributes has caused the octopuses and squids to hold a very particular place in man's imagination since earliest times.

Imagination makes the cephalopods uninviting as food. We eat oysters and lobsters, both of which often live on refuse. Why should anyone shudder at a plate of squid? These creatures live in clean water. They prefer live food and they have delicious smooth white flesh which tastes like the finest European shrimp. If cooked properly they are as tender as spring chickens. Perhaps this is why almost all coastal peoples in the world, except certain western Europeans and their descendants, do eat them.

There was hardly an 18th century mariner who did not report monsters whose tentacles enveloped 500-ton brigs from bowsprit to poop. But as far as we know, octopuses do not grow to any great size. There may be gigantic species still to be discovered at the edge of the great continental shelves, for octopuses appear to be predominantly shallow-water animals and the large

est are found quite near the shore. The biggest known is the common American Pacific coast species, which may be 16-feet long and have a radial spread of 28 feet. But it is a slim creature with a body only about a foot long and six inches in diameter, and the arms are very slender. So far, however, no octopus has been found that could support the fabulous yarns of ancient and modern sailors.

MANY other facts much more remarkable than mere size are now known about octopuses; for there are octopuses and octopuses.

There is, for example, the exquisite and inimitable argonaut, which is found in all warm seas at moderate depths and is a pretty straightforward kind of octopus but for two things. First, it has carried the art of chameleonism to such a pitch that even color photography is defeated by its efforts. All cephalopods, and the octopuses in particular, are able to effect remarkable color changes. Pigments of many hues pervade their skins, so that they are continually flushing red, then pink, then violet—in spots, bands, stripes, and an endless variety of patterns.

Annoy them and they turn purple like choleric colonels. Tickle them and they blush all over. Dump them on white sand and they blanch away. But the argonaut controls all the colors of the spectrum and plays most deftly on the blue and blue-green scales, with metallic silver, gold, and purple constantly shimmering and flashing across its surface. Blood-red spots, yellow frills, black rosettes, and molten waves appear and disappear, and the

kaleidoscope of colors never ends. Nor is that all. It manufactures, in a matter of hours, exquisite voluted shells of semitransparency. It does this by holding two of its arms over its back and "buttoning" them together with special knobs and suckers. These arms curve in circles and bear delicate webs, and it is from these webs that a film of jelly is secreted, which hardens into the shell. Only the females do this and the shells are cradles for the bunch of little yellow, grape-like eggs.

The argonaut can leave its shell at will and often does so. Sometimes after wandering about thus naked, it will dart into somebody else's shell. Quickly enveloping the shell with its thin arms and packing its other arms in beside its head, so that its great eyes just peep over the edge, it will go darting off backwards, propelled by its jet engine. The delicate shells of the argonaut are considered great prizes and are eagerly collected on many coasts. In Southern California, large and perfect ones have sold for as much as \$500.

BUT for the really bizarre we must turn to the cuttlefishes and squids. Perhaps the most extraordinary of all these is a very

small creature with tiny tentacles and rather pleading eyes that spends its life sitting bolt upright anchored to some rock at considerable depths in the oceans. This is the little spirula which is noteworthy not only because of its strange structure, but also because it has been left over from exceedingly ancient times.



MUSEUM OF NATURAL HISTORY

It has a parrot beak, incredible eyes, walks on its head, swims backwards by jet propulsion, and is the fastest thing in the sea.

It has a little sucker on its bottom for attachment to rocks, and it contains, almost but not entirely enclosed within its somewhat elongated mantle, a beautiful little curled and compartmented shell of alabaster whiteness. The wonderful little animal that makes these white shells was not itself discovered until comparatively recently.

Another odd creature is the common cuttlefish or sepia. I always remember the first time I saw one of these alive. I met it face to face underwater when bathing. The cuttlefish has a habit of completely withdrawing its two long tentacles, joining all its other arms together, and curving them down like an elephant's trunk.

It then looks extremely surprising and rather ominous. It is a flattened creature and it has a frill-like fin all round its edge. Waves of motion pass along this from front to back or vice versa,

according to whether it is going ahead or astern. Its eyes bulge out of its head so that it can look somewhat forward. Its appearance does not belie its intentions, for it is a rapacious beast. It is from the cuttlefish that most India ink is collected.

There are also the true squids which are not so popularly known, but which are far more numerous. They are of surprising variety. There is the tiny *Idiosepia* of the Indian Ocean, which grows only to a total length of three quarters of an inch. There are fairy-like little pencils of transparent gelatinous vitality, dotted with flakes of vivid flame or blue, that dart about the surface of the ocean.

There are others, tub-shaped and moribund, with tiny tentacles. There are species that have their tentacles armed with cruel hooks instead of suckers. Some have vast heads and large protruding eyes.

There are deep-sea species with rows of colored lights. These squirt incandescent clouds of glory to confuse their enemies. Some brightly-colored species have frills along the edges of their arms. Many of them button their arms together to form a spindle in front of their heads, thus streamlining themselves to obtain greater speed in jetting backwards.

Finally, there are the super squids or *Architeuthis*. The largest recorded measured 20 feet from tail tip to arm base and had tentacles 35 feet long. Its body was bulkier than an automobile, and its reach longer than a tennis court. Some specimens are almost barrel-shaped and are of enormous bulk, with a 13-foot circumference at the widest part. They

are estimated to weigh over 3000 pounds. In others, probably the females, the eight short arms may measure nine feet in length and be thicker at the base than a man's thigh. They bear suckers an inch and a half in diameter.

It seems that these monsters live in the depths, are nocturnal, and appear on the surface in daylight only when injured or weakened. They are then moribund and can be harpooned quite easily—a fact long known to the fishermen on the Grand Banks who cut them up and pickle them in brine.

Such creatures are quite fearsome enough, with their staring, eight-inch, blue-black eyes, to start the fables which we hear of sea serpents. Some are long enough to reach to the topgallant mast, if hauled by the tail. And yet this still may not be the end of the stories. The new, modern, hard-bitten Scandinavian whaling captains who hunt their profits in businesslike little stream chasers contend that they sometimes capture sperm whales bearing the circular scars of suckers as big around as dinner plates.

Perhaps, then, there are even greater squids in the Antarctic Ocean or really colossal octopuses in the deep. A sperm whale once became entangled in a marine cable off the coast of South America at a depth of 4500 feet and why should he have dived to that depth unless he was after his staple diet, great cephalopods?

The kraken, then, is a fact and not a figment of mediaeval fiction. It is a leviathan that can grapple with a 50-ton, bull-nosed sperm whale and can tear a sea lion to shreds. But it is still just a shellfish, a cousin of the humble garden snail and the oyster.



Slate-colored heads, white-ringed eyes, and snowy throats identify this mother and her young as blue-headed vireos. Although small in number these birds are among the best protectors of northeastern forests; tree-killing insects are their favorite food. They hang their nests in the forks of horizontal limbs.

CLOSE-UP: WILD BIRDS

A camera discovery by Hal H. Harrison

I HAVE two hobbies: bird watching and photography. The two have dovetailed perfectly. In the beginning, I was like the average camera fan. I took my camera to the seashore and filled my album with bathing beauties. When we took a cabin beside a Michigan lake, the album went fishy and long strings of bass were hung with art corners. Winter's first snow found me hunting scenics. The kids were photographed as they grew up. Sunday outings were faithfully recorded.

When I renewed a childhood interest in wild birds a few years ago, my camera and I took a new lease on life. Here was something not easy enough to become monotonous and not difficult enough to become discouraging. Thrills await anyone who accepts the call of woods, fields, swamps, and meadows, for birds are everywhere. As one's knowledge of wild birds and their behavior increases, results are noticeable immediately in the quality as well as the quantity of the pictures.



Everybody talks at the same time in this family. They are black-throated green warblers and are recognizable by their olive-colored upper parts, yellow cheeks, and solid black chins and throats. These birds spend most of their time in the tops of evergreens and are more often heard than seen.



Muddy leaves are the Louisiana water-thrush's substitute for man's masonry. On this tough foundation it builds a tidy nest of twigs, grass, stems, and pine needles, usually along a stream or in marshy places. Like the spotted sandpiper, it bobs its tail when walking and is often called "water wagtail."



A female yellow-breasted chat passes a tidbit to her mate. Largest and shyest of American warblers (insect-eating song birds), chats nest in tangled undergrowth and are seldom photographed. In highly plumaged specimens such as this pair the rich lemon coloring of the breast is tinged with orange.



The Kentucky warbler usually builds its bulky nest in short bushes or on the ground at the foot of a tree, as this one has done. Like the Louisiana water-thrush, it is able to walk in a normal manner instead of hopping. In July it leaves the eastern United States to winter in Central and South America.



When these blue jays are a little older they will be big (nearly a foot long), handsome and twice as defiant. The blue-gray strips on their heads—picked out by the color camera—will develop into conspicuous crests. Their comprehensive diet will include such items as acorns and beechnuts, other birds' eggs and young beetles and fish. Expert at stealing jays are often known as "corn thieves" and "nest robbers." Their range extends all the way from Nova Scotia to the Gulf of Mexico and from the Atlantic to Nebraska.

I remember the summer I started to take bird pictures. I found the nest of a yellow-breasted chat about four feet from the ground in an elderberry bush. As I approached, the lovely female left the nest, disclosing four spotted eggs. I set my camera on a tripod, focused on the nest, and retired to a spot some 40 feet away where I could hide. A long cable release permitted me to operate the camera.

Two hours later I was thoroughly disgusted. The chat refused to return to the nest, and I finally left without a picture. Returning home, I looked up the yellow-breasted chat in my bird guide. I found a picture labeled: "The only photograph ever taken of a yellow-breasted chat on its nest." Another caption described the chat as "one of the shyest of North American birds." I have since "tamed" this shyest of birds. Last summer I secured the only existing color picture of the male and the female yellow-breasted chat at their nest (page 19).

The house wren offers more novel and unusual pictures than any other bird. The neighbors, the kids along the street, friends in the country, all are spies for the bird photographer who wants to record the wren's strange antics. A farmer friend asked if I wanted pictures of wrens that were nesting in his work pants on a clothesline in his yard. After I took this unusual picture, the wrens nested in the radiator of a concrete mixer in the barnyard.

A bird photographer becomes used to being called upon to outwit his quarry; he takes for granted that every picture will require the usual precautions, the usual patience, and the usual

amount of equipment. I once photographed redstarts in a maple tree. It was necessary, I thought, to carry my complete equipment to the nest. Finally the bird blind was erected, the remote control wiring was rigged up, the ladder with a tripod top was in place. I was ready now to focus on the nest where I expected the birds after their fears had abated.

As I looked through the ground glass of the camera the male redstart landed at the side of the nest to feed the young. I was no more than four feet away. I shot all my pictures from right there; the blind and much of the other equipment was unnecessary. The birds paid no attention to me.

But this isn't always the case. Some birds will fight while others will vanish at the snap of a twig. I was fully a half mile away from the nest of a bald eagle one morning when the male spotted me and flew away. The female joined him before I was within camera range, and left her two half grown eaglets to the mercy of my camera.

Don't expect such a situation at the nest of a hawks, a duck hawk, or a great horned owl. Even the tiny hummingbird will make some attempt to intimidate the photographer-intruder at its nest.

SHOOTING birds with a camera offers more sport and more fun every month in the year than the thrill of pulling a gun trigger during the hunting season. The challenge to the picture hunter to outwit his game is present constantly, for wild birds just don't pose conveniently for photographs any more than they expose themselves to game hunters.

Spare The Twaddle, Save The Child

To produce children requires little study; to bring them up requires plenty

By Earnest Hooton

A GROUP of Harvard undergraduates, healthy young men who were getting along well in college, recently revealed their personal problems to psychologists who were studying the "normal" student. The most common problems were not those of sex, nor of money matters, nor of choice of career. One in every four of these young men had trouble with his family—especially his parents. They worried about Life with Father and Mother. Yet parents should be the principal source of help and comfort to their growing children.

It is much easier to spoil good human material than to improve poor stuff. Many promising children have been ruined because their parents knew nothing about human heredity. As soon as a baby is born, the parents seek resemblances of the infant to themselves or relatives. He is "the spitting image of his father," or he has Mom's smile or Dad's nose.

These physical resemblances, real or fancied, are of little im-

portance compared with the parental *belief* that children must be like one of themselves, or a combination of the two, in disposition, tastes, and abilities. If both father and mother are musical, or athletic, or brilliant students, or natural-born executives, they assume that their offspring ought to turn out the same if only they are given the chance to develop their inherited qualities.

MANY qualities of mind and temperament are probably inherited, but the process is not a matter of mixing the characteristics of parents and grandparents in equal fractions. Each person carries in his germ cells thousands of invisible determinants of the feature of body and mind that he may pass on to his children.

These are the genes; they come in pairs, or in multiples of twos, or sometimes in threes. It may take one pair of genes or two pairs, or a whole set to determine such a simple feature as the shape of your ear. Each parent

contributes only one half of the genes necessary for the development of any feature. When two of these genes match in an offspring, the child can be identical with both parents only if both sets of parental genes are exactly the same—when both parents, for example, have blue eyes.

If the parental genes differ—with one parent contributing a gene for an upturned nose tip and the other a gene for a downward pointed tip—the child may show either form of nose tip or a blend that looks different. In the former case, one of the parental genes has won out over the other; it is dominant. The gene that is licked is there but does not show; it is recessive. However, the child will have this recessive gene in about half of his own germ cells and can pass it on. It may show up in his children.

The point is that each of us carries in his germ cells innumerable possible qualities that do not appear in ourselves. From this tremendous assortment of hereditary possibilities, those that show in our offspring are the result of chance combination of a particular germ cell of the father with a single germ cell of the mother. The father produces millions of germ cells during his reproductive period and the mother hundreds of much larger female germ cells (egg cells), one of which matures every month.

Only one of the father's germ cells fertilizes the maternal egg cell. But the germ cells produced by a single parent are not all alike; some may have the genes that are dominant for a feature (those that will show). Another germ cell of the same parent may have the recessive gene that fails

to show when it is combined with a dominant gene from the other parent.

Ordinarily, recessive genes do not show in the offspring unless they combine with similar recessive genes from the other parent. Such recessive combinations result in the appearance of features in the children that may not be visible in either parent or in any near blood relative. Because of the almost innumerable possibilities within the different germ cells of each parent, and because only a single germ cell from each parent combines by chance with the other to produce a child, we cannot predict what will crop out in our sons and daughters.

EACH individual, then, shows a new combination of hereditary qualities. Although your child may be "bone of your bone and flesh of your flesh," he is a something drawn by chance out of the hereditary grab bag—maybe a prize, often a surprise, sometimes a blank. Parents should look upon each of their children as unknown beings whose qualities have to be discovered and studied. Instead of that they usually assume that their children are like one or other of themselves and try to bring them up on the theory that sauce for the goose and the gander will certainly be sauce for all of the goslings.

Intellectual, highly educated parents often try to force their children through the same intensive school and college careers that they have had, although the children may be better equipped mentally for trade or agricultural schools, or perhaps not capable of profiting at all by, or even wanting, "higher education."

A child may inherit a reading difficulty which occurs when he is neither completely right-handed nor completely left-handed and neither right-eyed nor left-eyed. His parents may never have had the least trouble of this kind, but they probably carry recessive genes which, doubled in the child, make it almost impossible for him to distinguish between the words "was" and "saw."

Such a child is likely to be a "mirror writer" and he has the very greatest difficulty in learning to read or to do arithmetic, to say nothing of spelling. A complete scholastic failure often results from this reading disability, which the parents (who are responsible for the genetic mishap) may blame upon the stupidity, laziness, or obstinacy of the child. The latter loses his self-confidence and becomes discouraged and bitter toward his parents.

It is equally possible for heredity to produce from two intensely practical, businesslike, and matter-of-fact parents a child who is sensitive, imaginative, and artistically gifted. In a family without intellectual interests such a child is likely to fare even worse than the unfortunate "dumb bunny" in a brainy family. These are only two examples of the many misunderstandings due to ignorance of heredity which make parents unhappy and may ruin really gifted children who need special treatment based upon a knowledge of what they can and cannot do.

The same training cannot be safely applied to all of the brothers and sisters in a family, because each child is unique and may require a different and specialized upbringing. We need a

science which will size up the abilities and disabilities of the child early in life and give his parents directions for correcting weaknesses and making the best of strong points. Somewhat later the child himself, or the growing man, could profit by such a diagnosis of his total organism. As it is now, parents often fail to understand their children until it is too late for anything except remorse, and the individual learns to know himself only when nothing can be done with that self-knowledge.

The most important study of a parent's lifetime is that of his own children. Upon the mastery of that study depend the happiness and success of the next generation. At present, parents must tackle this job of understanding their children by themselves; they cannot learn it from books nor from the snap judgments of child psychologists, nor from the theories of education, however supposedly "progressive." Before you begin to direct or to correct your child, explore his personality. Otherwise you may cripple him in his adjusting.

Parents have no alibi for unsuccessful children; the hereditary qualities of the children are conferred upon them by their parents, who also create for them the environment in which they develop. It is almost the easiest thing in the world to produce children. To bring them up well is nearly the hardest.

If you fail as a parent, you have lowered the general level of society by producing inferior offspring or by spoiling human stuff. No other kind of success can compensate for such parental failure.



Run over to the library and get me Gibbons' 'Rise and Fall of the Roman Empire' and the second volume of the Encyclopedia, Baltid-Brail."

The Laboratory

Edited by David O. Woodbury

NEW CONTROLS FOR TUBERCULOSIS

Serious tuberculosis, incurable by standard methods, is being controlled today by the revolutionary process of repeatedly stopping the patient's breathing altogether, for many hours at a time, over a period of several months. This gives the absolute rest that specialists have long sought for such patients.

Dr. Alvan L. Barach of Columbia's College of Physicians and Surgeons, after ten years' experiment, has developed a machine that does the patient's breathing for him. The apparatus is somewhat similar to the iron lung used in paralysis, except that the lung forces artificial breathing by changing pressures in a chamber, while Dr. Barach's invention maintains the same pressure inside and outside the lungs, at the same time varying it very slightly in the normal breathing rhythm. Thus air movement is continued with the chest immobilized. The process is as gentle as a breeze stirring in and out of an open window.

The machine is a cylinder completely surrounding the patient, whose head rests in a section of transparent plastic. Head and body compartments are separated by a comfortably fitting diaphragm, permitting the slight differences in pressure needed to get the air in and out of the chest

without moving it. As his "course" starts, the patient, connected by telephone with his doctor outside, is asked to breathe in unison with the machine, then gradually to stop breathing entirely. There is no discomfort; all of the patients so far treated have easily learned to cease respiration, then pick it up again when taken out of the machine. During treatment they relax and lie motionless for hours. Results show that six advanced tubercular cases have been cured, with marked improvement in four of the remaining six.

SPEED-UP IN HOUSES

Anything that will get that new home out of the dream stage and onto the vacant lot is of major importance in the present housing crisis. One such invention is the electric moisture gauge, a small device that tells how dry and well-seasoned lumber is and saves days or weeks in construction. To stay in shape, your house must be built of "pre-shrunk" lumber.

Ordinary inspection and guesswork are unreliable. But the little electric machine, which works either on lighting current or batteries and gives positive measurements of dryness merely by holding two contacts on the wood surface, cannot mislead or make mistakes. Tests can be made on the

building lot, and lumber that is too wet to make satisfactory construction can be rejected. Similar tests with the same machine, made on concrete, brick, tile, or plaster, will tell when these surfaces are dry enough for finish coats or wallpaper, and thus save peeling and expense later on.

MECHANICAL RETRIEVER

Sometime ago an investigation was made to find out what an ordinary citizen would have to do to recover a diamond ring or a \$1,000 bill dropped down a New York subway grating. It turned out to be unbelievably complicated, even if the lost property were in plain sight a few feet below the streets. Papers to fill out, officials to see, subway trains to stop; ladders, police guards, pondsmen—and very red faces. But a similar question: how do you retrieve a favorite monkey wrench dropped into a well, or a box of valuable papers on the bottom of a lake—has been beautifully answered by a remarkable little magnetic snatch-all that you set down on a rope.

The retriever requires no electricity. It is built up of several small "alnico" magnets—the new alloy many times more powerful than the best magnet steel—and is no bigger than a box of crackers. But it will seize and cling to a mass of steel or iron weighing 500 pounds. It is nonrusting, won't weaken, and can snatch invaluable metal objects that would otherwise be lost forever.

Designed particularly for the police, the retriever will fish up guns, knives, crowbars, or other important evidence from lakes and rivers, provided there is enough iron about them to give



the magnets a firm hold. It will also salvage lost tools on construction jobs, can be used to locate automobiles under water, or simply lift things on land without the bother of rope slings or hooks.

The only thing you can't do with it is to set your watch. The retriever's magnetic field is so powerful that it will scramble the works of any ordinary watch a foot away.

MAKE YOUR RADIO "ALMOST HUMAN"

The only thing modern radio sets won't do is to make up your mind on the programs you want. Soon even that drawback will be answered with an automatic program selector that will keep your set jumping all day (or all night), picking up your favorite programs one after another without a word from you. Just set the selector once by pressing a few buttons, then relax.

A special radio to do this was proposed before the war, but proved too complicated to be salable. But the new "program" selector, invented by Martin Brownshield, a radio engineer, is simple, inexpensive, and reliable,

and can be applied to any receiver. It consists of a clock, a small motor for turning the dials, and a set of push buttons and contacts. The front panel simply shows the clock face and a row of buttons marked with the stations you ordinarily receive. To order a program menu for the day, or for days or weeks on end, you set the special selector hand on the clock, say, at nine, press button WZZZ, then move it to ten, push button WXXX, and so on for as many different stations and hours as you like. The machinery digests this information and acts at the right times.

The automatic selector not only does your programming for you, but undoes your mistakes or plays ball with you if you change your mind. If you decide against a program previously chosen, simply set for the station you don't want, press a button marked "Erase," and so get rid of it. Or, if you have a sudden urge to be independent, turn a switch to "Manual" and go ahead on your own. The selector will not object, nor will it forget stations ordered for later hours. If you are unhappy without your radio playing all day, this is your gadget.

CAST IN PLASTIC

The plastics art has developed a way of casting delicate biological specimens inside blocks of transparent material for use in classrooms and laboratories, for museums, even for desk ornaments. Small embryos and bodily organs, jellyfish and plants, all so fragile that they have to be kept in bottles of formaldehyde, can now be cast in solid blocks, rugged enough to be used as paperweights. Yet the plastic blocks

are so transparent that the specimens can be studied under a microscope or viewed from every angle without damage. Plastic-cast specimens have been made for years on a laboratory scale. But now, a new formula and precision technique permit mass production for wider use.

The casting method is delicate. A chick embryo, for instance, is first "fixed," then treated in a number of chemical solutions, then dyed. A tray of liquid plastic is allowed to jell with a catalyzer, then more plastic is poured on and the specimen carefully submerged in it. When the upper layer has hardened the whole mass is baked and solidified by the usual polymerization process. It is sawed to shape, ground, and polished, resulting in a captured bit of natural tissue, as clearly revealed as the proverbial bug in the ancient bit of amber.

LIGHT MUSICAL NOTE

Speaking of plastics: pianos that stay tuned for months, even years, in average surroundings, can now be built by using plastic castings for various structural parts. Present construction of wood has the disadvantage that it is impossible to obtain absolute uniformity of material, even with wood of the finest grain. Slight variations in grain produce uneven swelling and drying out, which cause warping.

Uneven dimensional changes inside the piano loosen some strings more than others and the instrument goes "sour." Plastic parts, being grainless and perfectly homogenous, respond evenly to changes in moisture and temperature and tend to hold even tension on all the strings.

146 DAYS TO VENUS

G. Edward Pendray, Secretary of the American Rocket Society and leading jet propulsion authority, says: "The scientific facts in this story are accurate. No one can say how soon, but there is no theoretical reason why flights will not ultimately be made"

By Richard G. Hubler

Illustrated by Harold Faye

THE public address system is booming: "All aboard! Flight 18 for Venus. Express. No local stops. Now loading at Gate Five. All aboard!"

"Aren't you afraid to spend 146 days, traveling 750,000,000 miles, with a rocketful of men?" you ask.

"Oh, no. I've a sound reason for going," says the girl, a handsome blonde with gray eyes.

She smiles. Together you go through Gate Five. You skirt the great concrete-and-tungsten firing pit. Beyond is the rocket.

INSIDE, the arrangement reminds you of a padded cell. The walls are insulated to bursting. The seats are extremely soft and comfortable. The color scheme is gray-green and yellow—very soothing, psychologically. Once seated, you can't help bragging a little to the blonde.

"I was on one of the first rocket flights on earth," you say. "That was when they could only make about 400 miles. I went from Los Angeles to San Francisco in ten minutes. Only four passengers were allowed to go."

You stoop over and put on your magnetic slippers, tying the leather straps and stuffing the battery into your pocket.

"Nothing like this," you say waving towards the luxurious interior.

"PARDON me," says a voice. It is the handsome young steward. "I'll have to strap you in now, sir." He straightens the seat and tilts it until you are at full length. He straps your legs, your middle (with a special, wide, reinforced strap like the old pressure corsets), and your shoulders.

"Keep your head back, sir," he warns and starts on the blonde.

You feel as if you were on an operating table.

"When do we start?" inquires the blonde.

"Any moment now," says the steward. He goes on to the next of the 12 passengers.

"Keep your eye on that map," you say hoarsely to the blonde. You waggle a finger at a large map of the solar system outlined in neon green on the forward wall of the rocket, just behind the master's compartment. In the center is a gigantic space speed indicator. The blonde nods. You see her lipstick is suddenly vivid against her pale face.

The speed indicator hand jerks up as if it were being cranked. There is a muffled faraway roar. Then you feel the thrust. It discharges you—as if you were a bullet shot from a gun. In the instant you realize you are precisely that! Thousand, two thousand, three thousand miles per hour. In the center of the miles-per-hour dial, the little miles-per-second hand creeps around.

You lie buried in your seat, unable to move, to lift a leg, almost unable to breathe. There is a high-pitched hum which fills the cabin. You try to talk. You can barely whisper. "Turbojets for the take-off up to 700 miles an hour, then the atomic rocket motors cut in automatically."

You try to focus your eyes, which are blurred. You manage to catch a blink of the miles-per-second dial. It registers eight miles per second.

At that moment the ear-piercing hum ceases. Instantly the intangible pressure against your body relaxes like a hand removed from your chest. You forgot to look outside. Desperately you twist. Too late. The sky is no longer blue. It is a deep black, like soot.

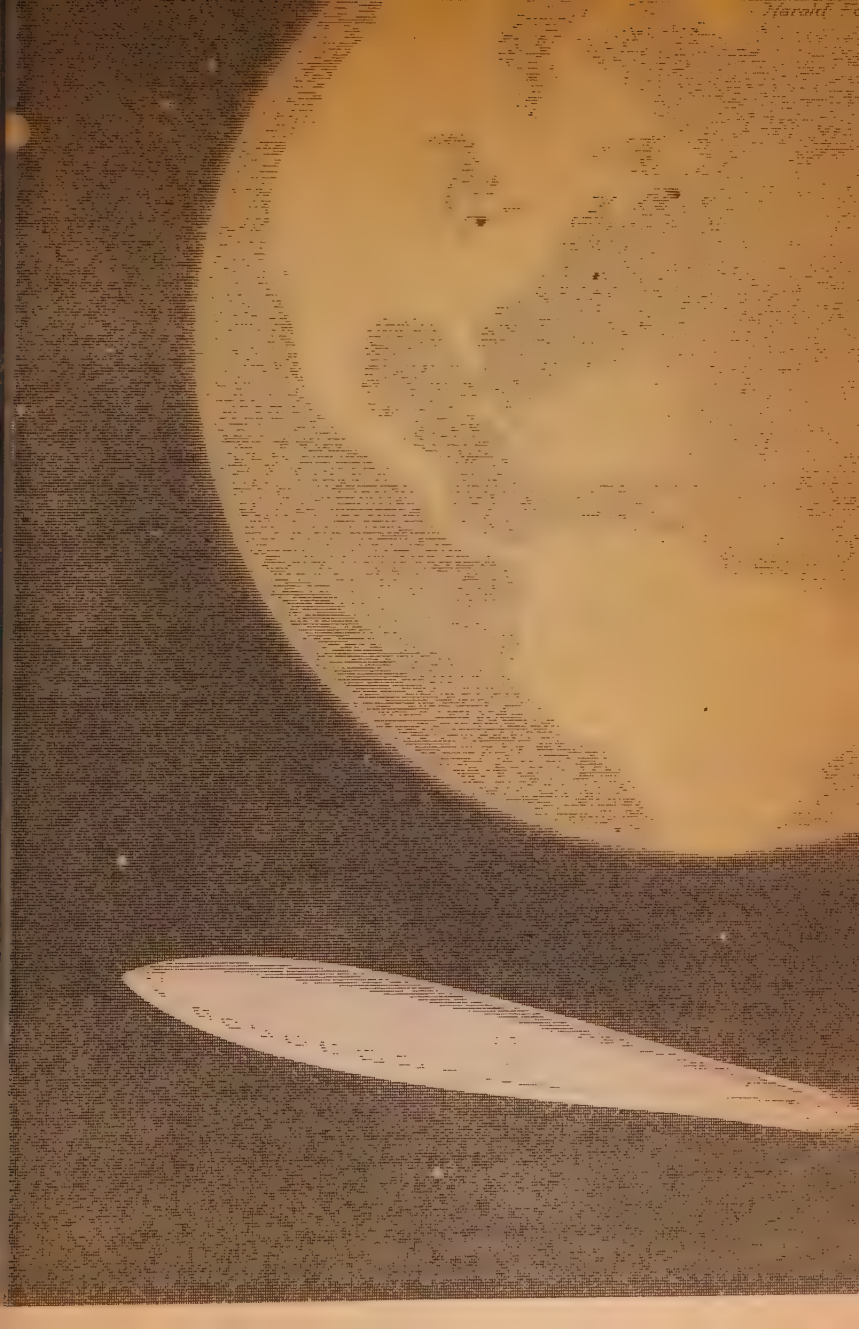
The steward recalls you. "All right, sir," he says. "If you have your mag slippers on, move about all you please. It's good to get the circulation started."

You are about to begin chatting when the steward speaks again.

"We're going to be together for nearly five months," he is saying. "I hope we will get along like any happy family. The company has provided a large and varied menu. A small gymnasium, large enough for two to exercise at once, is in the rear. There are 107 different kinds of games in the forward locker, as well as several hundred books and magazines. Radio bulletins from Earth will be posted daily. No gambling will be permitted. No liquor is allowed. Smoking is permitted. I am a physician. I have also, by special permission, taken degrees in divinity in the Protestant, Catholic, and Hindu faiths. The assistant master is a Moslem and a qualified psychiatrist."

The steward continues. "You will sleep in your chairs. Sheets will be provided and you will be notified when it is night. Dressing rooms, for two at a time, are in the rear. Toilet facilities are also there. Any questions?"

The earth, at the right, is seen in full daylight. The rocket, paced by the earth which it has just left, is seen on a path diverging slightly from that of the earth. Its speed is accelerating as the earth's attraction weakens and that of the sun grows. The sun is behind the observer, the moon at upper left.



You clear your throat. "Could you tell us our speed and position at the moment?" you ask. The steward consults his wrist chronometer and scans a pocket chart. "Speaking only of this moment," he replies pleasantly, "we are going approximately 17 miles per second and we are about 4000 miles off earth on course Orbit-for-Venus. Any other questions?"

There are none. The steward nods and goes to the rear. You lean over to the blonde.

"Scared?" you ask.

She shakes her head.

"Want to play a game?"

She shakes her head again.

As you try to snooze a little, an anxious little fellow with a bald head and a dried-up face begins to recite to himself. He is evidently nervous. Perhaps this is his first space-rocket flight.

"Eight miles per second to escape the gravity of Earth," he murmurs like a professor.

"We are coasting in space. If we went directly toward Venus it would only be a 26,000,000-mile trip. But we save fuel this way, falling in an orbit toward the sun. If we had a speed of more than 26 miles per second we could escape from the whole solar system and head for a star."

You sit up and tap the man on the shoulder. "Excuse me," you say coldly. "I'm trying to nap."

Instantly he turns. "If we were going to Alpha Centauri," he says ominously, "we should have to leave the earth at 50 miles per second. But that star is about 30,000,000 million miles away. It would take 40,000 years—more than a thousand generations."

"He is right, you know," says the blonde quietly.

"I've been to the moon and I'm not going to be treated like a stupid tenderfoot," you grumble.

"I've been to Venus three times," says the blonde.

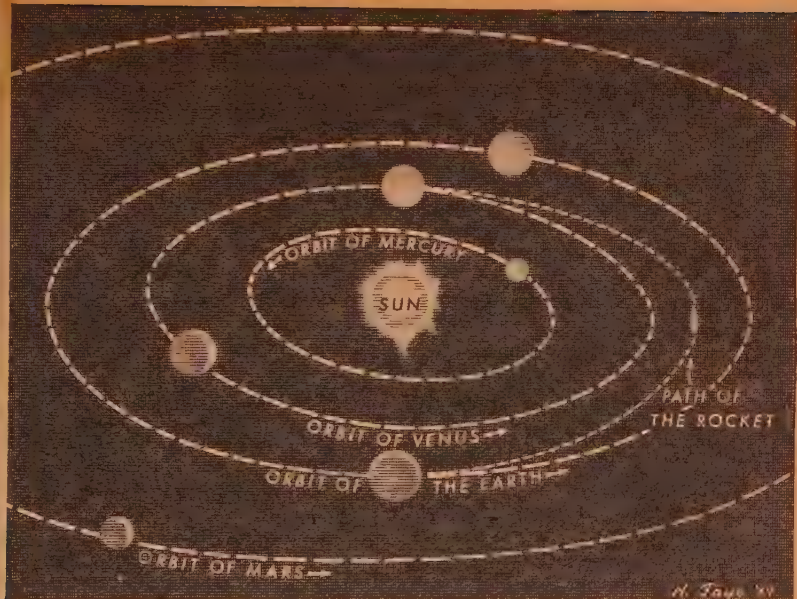
At your look of astonishment, she gives a little laugh. "I like the trip. You make a lot of friends, good friends. You can't help it, knowing them five months or more. Once we got off course and it was eight months."

You take a folder out of the seat compartment ahead of you and open it. By George, they are really out to sell this Earth-to-Venus junket! First those attractive advertisements in the national magazines and now this four-color splurge. It explains everything.

"This rocket took off in the direction opposite to the earth's rotation at a carefully precalculated second, timed to the orbit of the planet Venus. Immediately on freeing itself of the earth's atmosphere, it established an initial speed of eight miles per second. In accordance with its carefully plotted course, it headed in a direction opposite to that of the earth's movement in its orbit. Thus, it was still going about ten and a half miles per second in the same direction as the earth's movement about the sun (18.5—8:10.5).

"As the rocket draws away from its starting point, the earth's gravitational influence diminishes and finally becomes negligible compared to that of the sun. At this point the rocket has attained a speed of about 17 miles per second."

THIS sounds rather simple, you think. You read on.



In this perspective view of part of the solar system the rocket's path is an orbit around the sun determined by the direction in which the rocket was aimed. It will be captured from the sun's attraction when it gets close enough to Venus for that planet's attraction to dominate.

"The earth is balanced in its nearly circular course about the sun by centrifugal force, as if it were a ball on a string being twirled by a small boy. The gravity of the sun pulls the earth down one ninth of an inch per second—or per 18.5 miles—but the speed of the earth's revolution will not permit a further fall.

"The rocket is considered as another body in space. As it continues on its course away from the earth's gravitational influence, the speed of its fall toward the sun is constantly increasing.

"In approximately 146 days the rocket will be approaching the orbit of Venus at a speed of 23.5 miles per second. The speed of Venus in its orbit around the sun

is about 21.8 miles per second. As the rocket comes within the gravitational influence of Venus, the attraction of the planet adds about six miles per second to the rocket speed. Thus it will be overtaking Venus at the rate of about eight miles a second. This speed in space is negligible. In atmosphere it would instantly burn up the rocket, as meteors are burned up in the earth's atmosphere."

SUDDENLY you feel like a free balloon, rising gently against the single strap that holds you to your seat. Out here, you realize, there is no gravity and you are "like any other body in space," weightless and at liberty in nearly an absolute sense. It makes you

feel almost drunk. It is a disturbing sensation. You flick on the switch of your pocket battery and your mag slippers grip the deck of the cabin firmly.

"Look!"

It's the blonde. She's pointing out of the window. There is the most glorious double moon you have ever seen. It is so bright it makes you blink, big and gorgeous and white against the jet sky. The outlines are familiar. It's the earth!

It reminds you of the globe in your library at home, except it has no color—only brightness. And there is the moon like a faithful dog. Stars glitter like jewels on velvet.

THE little man in front of you turns his wrinkled face. "There's no danger of meteorites, really, if you're frightened," he says irrelevantly. "Less than there used to be half a century ago of getting hit by a truck. Only one chance in 50 years of a rocket this size hitting a one-milligram meteorite. One in a million years of hitting one bigger. Besides, I happen to know this particular rocket has self-sealing sides."

"That didn't use to be the big bug about these rockets," you say. "I can remember when they fretted their heads off—the designers, I mean—about landing. Should have been obvious to anyone that you could have braked off in space with blasts from the bow jets, once you were in the gravity field of your destination."

"Of course, the retractable planes helped out," says the blonde. "They could hardly glide a couple of times around a planet in atmosphere without those. Putting them out gradually and get-

ting the right angle was quite a problem. It's quite a delicate operation still. I think that the pilot of a ship like this is wonderful."

The busybody in the front seat jumps up again.

"I overheard you by chance," he explains, grinning. "There were quite a few other problems, too—cosmic rays, electro-magnetic currents, things like that. We still take chances, just like Columbus and Magellan did on earth. We're still explorers."

"At \$2,000 a head," you say.

"Don't forget it took a lot, billions, to develop this science of rocketing. In 1947, the best alloys could stand only 2000 degrees of heat and be usable. They didn't know much about the silicones either," he concludes.

"There was the question of food and air, too," you answer.

THE old man nods his head gravely. You can see that he still has some remnants of what must have been red hair. You are seized with a sudden desire to stump him. "Look," you say beligerently, "you seem to know so much about this rocket business, tell me: just what is it like on Venus?"

The old man shakes his head and looks despairingly across at the blonde. You look at her. She shakes her head.

"You know it's forbidden to tell anything about it," she says gently. "You took the oath yourself and signed the papers not to say anything about it to anyone who had not been there."

"Is it that terrible?" you inquire anxiously.

Both the blonde and the little old man shake their heads—vigorously, in unison.

"No," says the blonde, "not at all. It's—*different*. You have to get used to it. The whole point is that they don't want any wild tales spread about Venus. They want people to see for themselves. Maybe the mystery of not telling will keep some people away. But those are the ones we don't want. We want the people who want to find out, people with spirit."

She blushes prettily. You smile. She seems to be a nice old fashioned girl.

"I've got a pension," says the old man. "I'm going to live the rest of my life on Venus." He sticks his hand over the seat. "My name is Herrick," he says. "Samuel F. Herrick."

You give him your name, thinking. You snap your fingers. Herrick was the great-grandfather of space navigation, an unassuming red-haired professor at the University of California at Los Angeles. He trained the students who qualified as the first spatial navigators. You've heard that he was a crotchety old fellow who got cracked on star travel way back in the '40's.

"Isn't he extraordinary?" murmurs the blonde. You nod. "And he's quite right about the meteorites," she continues. "But that's not what worries me. Remember the Goddard Expedition?"

You nod again. She is thinking of the Robert H. Goddard rocket, named in honor of the American pioneer in the rocket field. It disappeared years before and was never heard of again.

"Well," says the blonde, lowering her voice, "I think it missed Venus completely—and didn't have enough fuel to get back."

"You'd need an awful lot," you say thoughtfully.

"I think it's just circling round the sun forever and ever," the blonde says seriously.

"Like another planet," you add.

The blonde gives a shudder. "I hate to think of that happening."

THE pedagogical fellow in the seat ahead is dozing. Returning to the advertising folder, your eye falls on a series of notes labelled *Rocketrivia*:

"The first hope of radio communication in space was established in 1946 when American Army scientists bounced radar off the moon. . . . A rocket trip is the most precisely precalculated trip ever devised by man. . . . No fear should be felt at deviations in course, for periodic fixes are taken on the earth and moon by the navigator. . . . Enough atomic fuel for five trips is always carried. Perturbation, caused by the attraction of other heavenly bodies is compensated for and the chief influence besides the sun, Earth, and Venus is Jupiter."

You look up. The blonde wants your attention. "You don't think anything will happen, do you?" she inquires anxiously.

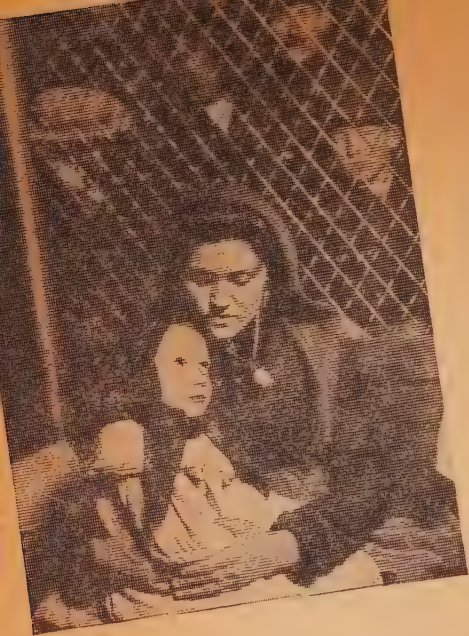
"No, no," you say heartily.

"I'm so glad," says the blonde. "I've taken this trip so often—I ought not to be scared—but I always am. Henry worries, too."

"Henry?"

"He's my husband. Master of this ship. He'll be coming back soon, now that we're on course. I'd like you to meet him. He likes to talk to older men."

"Yes," you mumble, "yes, of course." You sink back in your chair and pull your hat over your eyes. One hundred and forty-five days to go.



This famous picture was taken at Ellis Island by Lewis Hine. Thirty-five years later another newcomer to the United States writes a moving impression for all citizens.

MAY A NEW AMERICAN SPEAK?

By Juanita Wegner

I'VE only been an American a few days; officially, that is. It was Monday morning when my husband, a few friends, and I went down to Federal Court. The judge—a gray-haired man with a gentle voice—slowly and carefully asked me my final questions. Then he told me to raise my right hand and solemnly swear. I was so happy I cried a little. But one thing the judge said particularly struck me.

He told me my answers were perfect; that I must have known them a long time. I said I had—

ever since Austria, where I was born. Through Italy, where I had to flee when Hitler came into power. Through Argentina, when the militarists took over down there. For all my life I've wanted to be an American. I've dreamed about it, studied, worked for it.

"We Americans," the judge said, "those of us who were born here or came when we were children, sometimes forget that."

I don't think I ever shall. For in the past two years I've been touring the United States as my husband lectured on his experi-

ences as a foreign correspondent. I haven't said much, for my English is still not good, and this wasn't yet my country. But I've listened and looked and seen—things perhaps only a woman and a stranger to America might notice. Things you probably don't think about often, but which I, as somebody who wanted terribly to be an American, could feel down to the bottom of my toes.

IT STARTED the day I arrived in Brownsville, Texas. In country after country I'd stood in fear and trembling while somebody investigated my grandmother's religion or my husband's political party. I expected the same here. Instead, the officials smiled. Could they help? Was there anything I wanted to know? I became a name, not a number. And they treated me as if I were welcome and belonged—not as a possible criminal.

Then the flight to New York. We crossed many state borders—but there were no customs men or guards at each stop. No more questions except did I want a cup of coffee or some water? No more examinations. You don't know what that means. Even today, after I've visited some 39 states I can't get over how I can go where I please, when I please. For everywhere else in the world the gates are still closed; everywhere else you move only with permits and papers and by paying the right people.

MANHATTAN and its skyline were impressive. But not half as wonderful to me as the look of the people on the streets. How clean and healthy they were. Not just the rich in the smart cafés as in

Europe or South America, but everybody, everywhere. The drivers of the buses and the redcaps with our bags. The workingmen going to the factories. Kids in the parks. For unless you see it, you don't know how people look elsewhere. They just don't have the luxury of the things you have. Yes, the very bathrooms themselves. To you they are normal. To the rest of the world they are America's fantastic richness.

The stores gave me the same feeling. Not the Fifth Avenue luxury shops. They have places like that in Buenos Aires, Paris, and every other capital. But the corner groceries and the markets. The drugstores and the newsstands. So many of them. And the things I'd read about were on the shelves to touch and buy.

And the people. It wasn't only the look of the people but the way they dressed and went about their affairs and lived. Everybody, of course, told me about clothing shortages. No open-toe shoes. No white shirts. But everyone I saw looked so well turned out. I remembered the years I'd seen people elsewhere wearing one dress or one suit; the shabbiness and poverty not only of workmen, their wives, and children—but their bosses.

Nor was it the physical greatness of the cities, the theaters, streets, bridges, and tunnels which excited me. But the way all those people lived together. I could see an eagerness to know more, to earn more, to do more, give more, that contrasted so with the exhaustion, ennui, and pessimism of so many other peoples and places.

Being a woman, it was most striking to me in the homes.

Shortages and crowded hotels—of course I saw them. But it was the little houses, neat and proud, with gardens and laughter, where you didn't have to be afraid at night that somebody would come in the door and take your father away (as they did mine) nor frightened that every mail might bring new restrictions to be obeyed or else. . . .

It was in one of those houses that I first heard the President on the radio. Not as I'd listened to Der Fuehrer and Il Duce, or El Coronel in Argentina. The President explaining, talking to us like friends. And in another home I heard my first American political discussion. Everyone was saying what he thought—even youngsters—and no one afraid.

I heard and saw another side as well—the side the judge was thinking about. The woman in Spokane who invited us to a luxurious dinner and then spent the evening explaining that things were getting terrible. The war over almost two years and still no sugar or avocados! One had to go to two or three stores, sometimes, to get things! No maids and help becoming so independent! The country was surely going to the dogs. •

There was the lady in Indianapolis. The closets in her apartment were so small she'd go out of her mind if Jim couldn't find a larger house.

It was then I wanted to tell them about the history of this, my new country—the troubles it had overcome in the past and the joy and wonder of what it meant to me. To tell them about the citizenship class, where I was studying to become an American—with French and Italians,

Swedes and Russians, and two Chinese boys. How, forgetting our strangeness, different languages, funny accents, we were, word by word, learning about the groups which first came to the United States. Their unhappiness and persecution at home. Their desperate hunger. How they, like us, found a chance to help to build a new and different country.

I wanted to explain that perhaps to them it was ancient history—lessons studied at school and half forgotten. But how to me—and to thousands of new Americans like me—it wasn't textbooks and monuments but something we'd just lived through and were living now. Something we remembered in the middle of the night or whenever we picked up our papers.

IT MAY be that sometime, as the judge said, I'll forget it too. But down underneath, I don't think the feeling will disappear. True, our country does have doubts and confusions today. There are times that make many nervous, depressed, and uncertain. But we have something else—a country with freedom to work and play, to think and talk, to improve our lives and our families.

The book from which I studied my citizenship said that as Americans, new ones or old, we had rights, and also responsibilities. Privileges, but also debts. That it was our duty to defend the things we liked, and do something about things we didn't like.

I've been an American only a few days. But if I could have one wish, it would be to go up to everybody I meet and say: "Aren't we lucky to have this chance! Let's never forget it."



"Heard any new peace rumors lately?"



TO THE CLASS OF '47

*Survival I and II—a postgraduate
course not listed in the catalogue*

By O. Istris

IT HAS been customary these many years for elderly Commencement Day orators such as myself to expound to you your manifest duty. You have been solemnly adjured to go forth (Depart From These Hallowed Halls Of Learning) and, armed with your baccalaureate degree, save the world. After making this modest request the orator generally felt that re-enforced satisfaction which comes of delivering irreproachable sentiments and then transferring their execution to somebody else.

All these exhortations notwithstanding, a quick continent-to-continent poll reveals a still unsaved world. That is because the elderly orators have been making a demand that could not possibly be met even by those college graduates most likely to succeed. The orators have wanted you at once to transform this punch-drunk planet into a heavenly Utopia.

I shall today entreat you more reasonably. I shall not plead with you to become angelically

virtuous men and women, for I see no grounds upon which I may demand more virtue from you than I do from myself. More important, by what right do I ask you to be angels when I am not so positive that you will long be men and women? And in that \$64 question, sweet girl graduates and bright boy graduates, is hid the theme of my discourse.

For this is Commencement Day; but whether it marks the commencement of your mature flowering or the commencement of your decline and fall lies open to grave conjecture. Be patient then for a few minutes as we endeavor roughly to chart your tomorrow, trying to say whether it be the prelude to a fruitful future or but the final term in that long series, the past.

You have learned that today the Roman scepter throws but a faint shadow across the dusty pages of your history books. You are aware that the body of feudalism, though it breathed for centuries, did not breathe forever.

The edifices of all civilizations, however magnificent, contain in some corner a spare room enclosing a death bed; and the Pyramids, gigantically thrown up to evidence the arrogance of empire, have dwindled to the status of organized rubble. Yet few of us can seriously conceive our culture to be no less subject to mortality, just as no one, except the philosopher and the saint, really believes that he will die.



It is almost impossible, is it not, for you even to play with the possibility that, for some ages to come, yours may be the last generation of civilized Western man. Yet unless you play with that possibility and incorporate it into your thinking, you are unprepared for life. It does not matter that you are a Deke. It does not matter that your father is holding ready a desk for you in his brokerage house. It does not even matter that you are an All-American fullback (much less, of course, that you are Phi Beta Kappa). Unless you realize that you are part of a civilization, which *during your own time* must either change or die, you are unprepared for life, and your college career has been a waste of effort and money.

You are young; you do not

possess much past and are not possessed by it as we, your elders, are by ours. We know a great deal, and most of what we know is now wrong—though it was not always wrong. You youngsters know much less; hence you are capable of learning what is now right. It is easier for a young man to accept the possibility of a basic change in the universe than for an old one to accept the possibility of a slight change in his club regulations. So I will now repeat what all my equally platitudinous predecessors on this platform have always said: You Are The Hope Of The Future.

What future?

Here, as some see it, is one *possible* future, sketchily outlined in three general statements:

1. A fairly large proportion of the world's children, women, and men, including particularly those who by accident inhabit the planetary area roughly 30° N. by 50° N. latitude, 70° W. by 125° W. longitude, will during the next decade or two die premature and unnatural deaths.

2. The technical and industrial base on which "advanced" peoples like ourselves rest will be gravely and perhaps fatally disrupted.

3. The system of ideas and incentives (call it Western Civilization) which is what *really* sustains us will be wrecked, to be replaced by a new system. This new system—which is as old as the Egypt of the Pharaohs, for it is merely tyranny in modern clothes—will offer the richest nourishment to two extreme types of living organisms: near-paranoiacs and human automata.

TOWARD these three statements—actually they are indivisible—

you may adopt one of three attitudes, each involving a particular line of conduct. First, you may reject them as absurd. Second, you may accept them with resignation or approval. Third, you may investigate them.

First, *you may reject the statements as absurd*. In that case you will endeavor to lead much the kind of life that our present culture holds out as desirable. It is the kind of life I and millions of my fellow Americans have been leading.

You are probably familiar with its main features: commercial competition; the accumulation of money, objects, and insurance policies; the pursuit of passive diversion (spectacle-sports; movies, radio, magazine-and-newspaper reading); clique-gregariousness (the club, the labor union, the church); the attainment of re-



spectability (well-dressed wife, well-mannered children, well-invested securities); the shunning of political activity together with a liking for political conversation; a preference for angle-figuring over rational thought; respect for law, automatic gearshifts, order, cleanliness, mother, individual initiative, business, busyness, people like ourselves, and all successful folk, including cinema stars, radio comics, and political, industrial, and labor

leaders with top-flight Neanderthal minds.

There is nothing harmful about this life, and I am far from deriding it. It is, except as regards the well-invested securities, the one I have myself for many, many years been leading. It is a life which, for all its absurdities, has hidden in it the seeds of freedom and ultimate decency. There is only one thing the matter with it: unless the evidence is false, you will not be allowed to live it much longer.

Second, *you may accept the statements with resignation or pleasure*. If you are resigned and your glands are on the quiet side, your cue is merely to drift along in a kind of mild coma. If you are resigned and your glands are lively, you will adhere, as so many in the past have done under roughly similar circumstances, to the philosophy of *carpe diem*, dancing your rumba at the foot of a volcano.

If you should welcome these statements, not with resignation but with approval, you need have no fear of standing alone. There are quantities of people, known as realists, in all countries who have already in their minds written off one or more atomic and ultra-atomic wars to come. Professors have written books suavely explaining both the inevitability and the propriety of the ant heap state. The German, Oswald Spengler, was such a professor, and we have some of them in our own country. Generals have calmly accepted the probability of the death of 25,000,000 of our population as the unfortunate but necessary result of a sudden attack. Publishers and journalists of the Goebbels type—a type not in the

least peculiar to Germany—look forward with interest to a social order in which the minds of human beings may be manipulated at will. They are already warming up for the game.

It is a grave error to assume that all men love freedom. Many have a deep passion for dictatorship, whether it be the small dictatorship of the family, or the



vast dictatorship of a whole country. Many more have a deep passion for servility. The first group loves irresponsibility; the second, no responsibility. Both groups—how expensively this was rehearsed for us in Germany between 1933 and 1945—*must* hate detached thought and what is loosely called culture.

The reason is clear: if one thinks long enough one is bound to conclude that freedom is a good. Plato said it long ago: "As there are misanthropists or haters of men, so also are there misologists or haters of ideas." And the two, you might add, are one.

Perhaps you are such a misanthropist-misologist. Do not hesitate to confess it, for you will find yourself in the company of some of the greatest and most famous men in history. Indeed, for long intervals the world has been owned and operated by such men, the powermen, the strong men, the shrewd men, the angle-figurers, the accumulators.

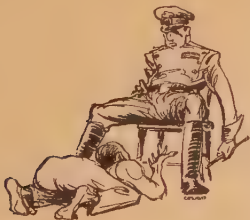
If you feel in yourself an irrepressible dislike of, or contempt for, people who do not resemble you in race, color, religion, manners, economic background, social behavior; if to your inward vision humanity seems to be or should be arranged in a fixed, hierarchical order; if you are confident that the application of sufficient force will solve any problem; if the idea of violence subtly fills some of your unconfessed daydreams; if the notion of obeying a "superior" supplies you with a secret comfort; if in your judgment mankind has worked itself into such a complicated mess that salvation can come about only through the imposition of "order;" if you are heartily sick of the words nobody understands, such as democracy, freedom, justice; if you are intrigued by the words everybody understands, such as success, power, security; if in the depths of your heart you feel that the idea men, from Socrates and Jesus down to your own philosophy professor, are but a procession of futile windbags; if these suppositions awaken in you a positive response, then you will probably be a happy and useful citizen of that future state so well characterized by H. G. Wells as a human termitarium.

IN THAT case—for it is my duty as a Commencement Day orator to proffer helpful advice—I would urge you to work as hard as possible to bring the next war about, making sure that the "victory" will be ours. But in your proper zeal to destroy the foreign enemy, do not lose sight of the more insidious enemy at home. That enemy is the detached intelligence, and you must do every-

thing you can to lower its prestige.

You must, for example, vigorously attack those men and women who are subject to the absurd delusion that there is some nobility in every individual. You must—but you hardly need specific counsels; your own sound, healthy instincts will tell you which side to choose, which men to cultivate, which phrases to utter, which measures to support, and which office-seekers to elect. And, should the atomic bombs miss you, and the killing emanations and germs and poison gases and clouds of fire—should you survive all this, I predict for you a brilliant future. You will end up as master or slave and in either case you will feel just dandy.

HOWEVER, it may turn out that you wish to serve as neither master nor slave—for both are servile, each being the prisoner of an unnatural relationship. It may be that you neither accept nor reject the dark future I have sketched.



Schooled, as I presume you have been, in the methods of free inquiry, you may prefer a third alternative. You may prefer to *investigate the statements*. You will then seek to determine, first, the degree of probability of their

truth; and, second, the methods, in case that degree is found dangerously high, of averting the catastrophe they picture.

Very well. We will start with some dismal news. You have just spent four years in an atmosphere of books and studies, at least in part. You are doubtless eager to step out of this atmosphere into what is loosely called "practical life."

Such an eagerness is quite understandable. But there is a catch to it. To determine whether that "practical life" is to continue (otherwise there's not much sense, is there, in rushing into it?) you will have to go back at once to the very thing you have just left behind: the world of thought.

I am not underestimating the difficulty of your task, for there is nothing harder than fundamental thinking—and that is the requirement for this course, which we may call Survival. One and Two. Those who do not care to elect this postgraduate course need listen no longer. They should remember, however, that they have thrown away some of their chances of persisting as free men and women who are slowly on the way to become civilized men and women also.

To the die-hard rest of you: first you must study something you cannot see, touch, taste, smell, or hear: the atom. To do this read Selig Hecht's book *Explaining the Atom* (The Viking Press, 18 East 48th Street, New York). This will require about 12 hours of concentrated work: like all good books, *Explaining the Atom* is clear but not easy. After these 12 hours, you will know more about atomic energy than

virtually all our representatives in Congress, most of our other officials, and most of our military leaders; for you will know that there is unfortunately no "secret," as supposed, to the manufacture of atomic bombs.

Next you must study Hiroshima. Not the event, which is what the newsreels and picture magazines are so anxious to convey to you, but the meaning of the event which, as they do not make a specialty of reflection, they are not quite so able to convey to you. Your study of the meaning of Hiroshima can best be started by dropping a postcard to the National Committee on Atomic Information, 1749 L Street N.W., Washington 6, D. C., asking for a list of their study materials. Some of these materials are free; the rest—including a year's subscription to the *Bulletin of the Atomic Scientists*—add up to an investment of exactly \$6.50, approximately the price of two tickets to the movies plus four drinks afterwards. As a consequence of your reading you will come to many conclusions about the bomb.

One of the conclusions will be that it is less a weapon of war than a method of genocide. You will reflect on the meaning of the difference that one will now find between war and genocide.

Now you must on your own do a little research into the history of invention. From this you should emerge with one idea: that the atomic bomb is merely one of a series of more lethal weapons to come. You will link



this fact with another, which you will find demonstrated by the researches of the best of modern historians: that improvements in the art of war tend to accompany setbacks in civilization. The greater the improvement, apparently, the greater the setback.

You have now in theory completed the preliminary work required in our course, *Survival One and Two*. It is not my purpose today to lay out a curriculum of advanced studies, for you are bound to perceive its proper direction. I will, however, outline two general conclusions that your elementary studies are apt to suggest to you.

The first is that Hiroshima symbolizes one of the most crucial events in recorded history. It symbolizes man's formal announcement not merely of his ability but of his apparent willingness to make an end of himself. You will conclude that, if suicide is to be avoided, a fundamentally new relationship will have to be established among men, nations, and the physical energy that science has released. That new relationship you will yourself have to determine. This will take laborious reading; plus a great deal of stripped, uncompromising thought. Dull work—but there's no way out of it.

Your second general conclusion is equally important. By and large you will find that the most sensible—if also the most frightening—statements about the meaning of Hiroshima seem to have been uttered by the "im-

"practical" men, such as scientists, educators, philosophers, and writers. The fuzziest statements, with some honorable exceptions, seem to have come from the "practical" men in all countries.

A little reflection will give you the reason for this odd circumstance. By the very nature of their jobs (research into the truth) the impractical men are accustomed to think detachedly; to think, at least as compared with the rest of us, in terms of all time and all space. Once in a great while this kind of thinking becomes necessary, not for the long run—it is always necessary for that—but for the short run. Now is one of those times.

Practical men, by the nature of their jobs (action in terms of the present plus a short-term future), are accustomed to think expediently. Expedient thinking, conditioned by the practical men's perfectly understandable fidelities to a particular time and place, is unfortunately unequal to the task of solving the problems raised by Hiroshima.

Hence you will probably place more emphasis on the ideas of certain philosophers, historians, educators, and scientists than on the utterances of commissars, foreign secretaries, and editorial writers. In time you will learn to separate almost by instinct pre-Hiroshima thinking from post-Hiroshima thinking.

One odd thing you will discover—this will be confusing at first—is that pre-Hiroshima thinkers can be contemporary, and post-Hiroshima thinkers may have been dead for a long time. For example, Molotov and Thomas E. Dewey strike me as pre-Hiroshima; whereas Plato is surpris-

ingly post-Hiroshima in his ideas.

By the time you have reached this point you will be an altered human being. Certain qualities that are precious and lovable you will perhaps in part have lost—vigorous optimism, easy gaiety, and maybe, though Heaven forbid, humor. That is the penalty you must pay for being part of the most terrible of all recorded centuries.

You will have become, not a pessimist, but a man or woman with a sense of tragedy. You will have become big enough (your studies in time and space will have enlarged you) to conceive *as a real thing* the possibility of a major cataclysm, comparable in its effects to the coming of an ice age. When you are transformed into this altered human being, you will be able to think of methods of averting the cataclysm—but not before.

Some of you—I hope all of you—will have formed a new view of politics. You may even want to enter the field, determined to transform it from an arena of power-manipulation to an agency for the just and rational governing of human beings.

At this point I must cease my exhortation. I cannot tell you what to do next. What you do will flow out of what you are. If the scale of your thinking has become sufficiently great, the scale of your actions will be correspondingly great. That the actions must be great and not small, rooted in the future, not in the past, is obvious from the circumstance that our present dilemma is great and not small, unique and not traditional.

This is Commencement Day.

It is time to commence.

WAY OF THE WORLD

NATIVE INGENUITY

A former tech sergeant tells me of one remarkable procession he ran into while defending our democracy in the verdant jungles of New Guinea.

It was led by a native carrying a shield and a spear, and of course, a bone in his nose. His wives and children followed, laden with fishnet bags full of the results of a day's trading with American troops. As the tech sergeant eyed the haul of everything from army gear to razor blades, he was greeted in English by the grinning native. He asked what the "bong" intended doing with all his merchandise.

"Open store," was the prompt reply.

"But to whom," the tech sergeant asked, "will you sell all this stuff?"

The "bong's" grin reached still further toward the ends of the bone stuck through his nose as he answered with the knowing pride of the entrepreneur, "Damn fool natives!"

—Gail Davenport

THE PÌOBAIREACHD BLUES

MacCrimmon's College, near Dunvegan, in Scotland, is one of the most arduous schools in the world. It trains bagpipers. One must blow a minimum of 195 *piobaireachds*, compositions to you, to get a degree.

MacCrimmon's limits its enrollment to 12. Only the most talented are permitted to blow at the masters' feet for a period that

may last from five to ten years.

The college, which is the oldest bagpipe university in the world, had a dim beginning sometime in the early 1600's when a MacCrimmon blew so lustily and well that the keening, wheezing, and wailing was heard all over Scotland. Later MacCrimmons brought the bagpipe to a high art, and began a remarkable system of teaching music.

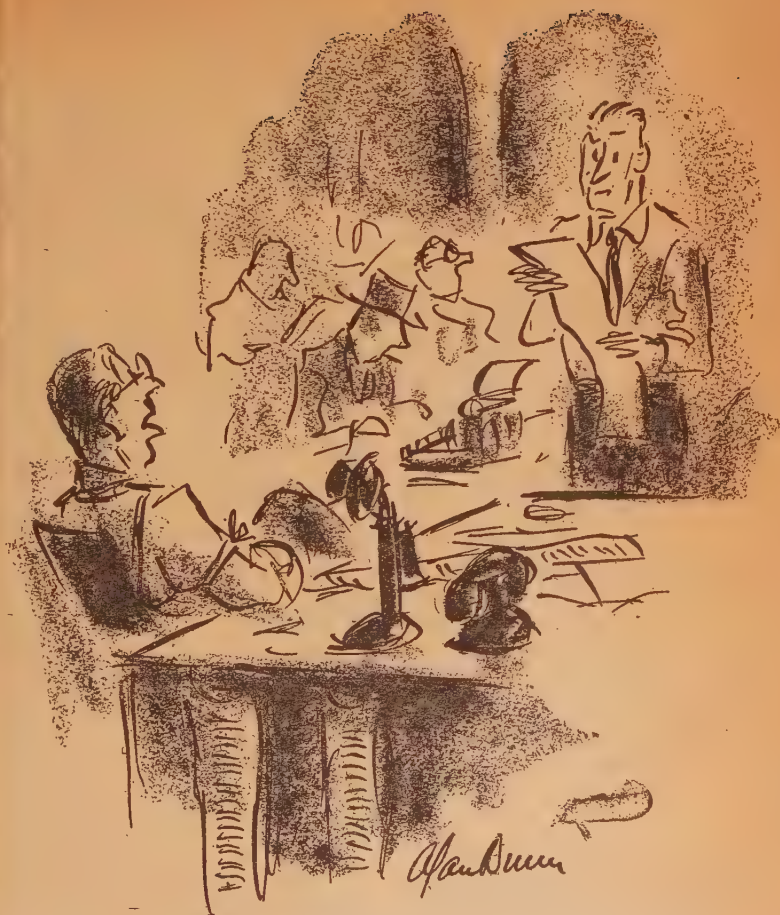
The method is called *Cann-taireachd* and consists of four steps: memory; fingering the tune to a flute or chanter, but silently; playing the tune on the flute; and then, finally, playing on the bagpipe itself.

Students are put through a jabberwocky of vocables such as "Hindo hodro hinda hinda chin drine"; or "Hio dro hi ri hian an in ha ra." There was no way of using the formal Do, Re, Mi in teaching cacophonous sounds. The queer syllables represented both the movements of the fingers across the holes of the chanter



and the sounds that the pipes would ultimately make.

Only the determined student could memorize the gibberish laid down by MacCrimmon, but those with a lighter touch set ob-



"God only knows—it was asserted by the capitalist-controlled U. S. press and denied by the Moscow-dominated Prague radio—"

scene lyrics to the rhythm and a kind of collateral folk chantey developed.

Today you can go to the shores of Loch Dunvegan, and find freshmen caroling their lessons across the water in unprintable Elizabethan doggerel.

MacCrimmon himself had an adventurous life. While battling against Bonnie Prince Charlie, MacCrimmon was taken prisoner. That night his student, Bain, overwhelmed by a premonition, wrote the now famous *MacCrimmon's Lament*, one of the immortal pieces of bagpipery. His captor's own pipers refused to parade when they heard that MacCrimmon, whom they worshipped, was in prison. MacCrimmon was released. He came out with his pipe blowing a dirge that sent the populace into tears. He was slain that very day, fulfilling Bain's foreboding and giving currency to his great *Lament*.

Instruction at MacCrimmon's is individual and competition is keen. Each applicant must produce a medical certificate and evidence of serious intensity in music and the bagpipe. Lungs, heart, and will must be sound, for it's a long blow to a landing. They are hardy men, these pipers, and it takes a real man to step into their skirts.

—J. Alvin Kugelmass

OPEN ALL NOCHES

Two smiling American brothers introduced Latin America's first soda fountain to Mexico City. In 47 years that fountain grew to be the center of one of the hemisphere's busiest, best-known institutions, Sanborn's of Mexico.

It is the meeting place of more than 2,000,000 persons yearly. It is one of the world's largest drug-

stores, whose owners are leading importers of clothes, furniture, perfumes, and a thousand other products. The store has been responsible for the revival of Mexico's silver, pottery, and native craftwork.

When Walter and Frank Sanborn started their shop, most Mexican drugstores were dirty and badly run. The Sanborns startled Mexicans by refusing to pay doctors a kickback on prescriptions. They provided the city's first quick free delivery by bicycle.

These unprecedented methods soon had an immediate effect on the German firms which then had a majority of the Latin American drug business. One company, seeking to take away Sanborn's representation, offered a United States manufacturer a tremendous order. Frank Sanborn sped to New York, and persuaded U. S. manufacturers to take their representations out of German hands.

Perhaps Sanborn's outstanding achievement, however, was their purchase of the ancient *Casa de los Azulejos* (House of Tiles), an old colonial palace in the heart of the Mexican capital. At great expense the Sanborns had it restored to its original splendor. Forbidding guests to mention politics, they made the place a social and diplomatic headquarters. Diplomats met colleagues and cabinet members dropped in at tea time.

Today Sanborn's remains the favorite meeting place of Latins and tourists alike—a hemisphere goodwill center. But, the brothers told me not long ago, "When we started, all we wanted was a good drugstore."

—Ray Josephs

MARTINIQUE

The island with its volcanic Pelée.—“a lovely, voluptuous woman with a dagger concealed in her hair.”

By Stuart Cloete

PERHAPS because volcanic Pelée has kept modern industrial development at bay, the approach to Martinique remains as primitively beautiful as any. Pelée, the mountain that took 40,000 lives in a single hour, rises out of jungle that looks like dark green moss in the distance. It is a green mountain, livid, streaked with gray gorges, fertile valleys, and steep kloofs or ravines fat with trees which, bound together with roped lianas, climb into cottony clouds that move swiftly in the cool upper air. Below, among the ruins of Saint-Pierre, the heat is intense, unending, and almost unendurable, with practically no change from season to season.

Coconut palms, in plantations and in isolated groups, fringe the sandy shore. Sugar plantations, green as alfalfa, blanket the lower hills in a patchwork of cultivation. Around the ship as she lies at anchor swarm natives, naked but for their loincloths, in little canoes, as wild as the Kroo-boys from whom they stem, shouting and laughing as they dive for the coins thrown by the

passengers—the duplication of a scene in which the act remains the same, and only the geography changes, in all the warm seas of the world. Under water, the feet of the diving boys are so white that the boys look as if they are wearing sneakers.

The bulk of the population is colored, and varies from the *sacatra*, who shows hardly any trace of European blood, to the *sang mêlé*, who is the opposite, showing scarcely any trace of Negro blood.

Discovered by Columbus in 1502, the island is said to have drawn its name from the native Madiana or Mantinino. Its main products are sugar, rum, coffee, cocoa, and vanilla.

This is Martinique, the center at one time of a fabulous West Indian sugar culture, of Creole heiresses, of absentee landlords; of richness, debauchery, wickedness, cruelty, and beauty. Here wild slaves from Africa were broken to their work and here the descendants of other older slaves, their blood mixed with white French blood, lorded it over the

newcomers, drawing silken skirts away from them as they passed.

Napoleon's Empress, Joséphine—Marie-Josèphe Rose Tascher de la Pagerie—*la belle Créole*, was born in Martinique in 1763. Her father was the manager of a sugar estate at Trois Islets. The plantation was ruined by a hurricane soon after her birth and the family lived in some poverty in the sugar mill which was all that was left standing. Later, her aunt took her to Paris where, at sixteen, she married Vicomte Alexandre de Beauharnais. After his execution during the Terror, she became the wife of Napoleon Bonaparte.

MARTINIQUE became widely known to the public for the eruption of Pelée, the 5200-foot volcano that destroyed the town of Saint-Pierre. In 1902 Saint-Pierre was a town of 40,000 people—the largest town in Martinique. It had taken three centuries to build and was destroyed in as many minutes. Once, it was a little Paris of the Empire period, where dresses were cut as they had been in Paris a century before. There were cafés with striped awnings, a cathedral, a theater. Well built stone and brick houses with red-tiled roofs lined the water front. The small shops and houses of the merchants merged into larger villas surrounded by gardens where the town climbed the lower slopes of Pelée.

The French who had come here had come to stay. They had constructed a society and a way of life. All of it was to end suddenly, to be wiped out in a few minutes by the eruption of the great mountain to which they clung. Only one man survived—

a murderer incarcerated in the stone jail. Only one ship escaped from the harbor—the *Roddam*. So great was this disaster that the French government even thought of evacuating the island and giving up the colony.

There had been other eruptions, other disasters of a kind common in the tropics. There had been war, pestilence, hurricanes, but this was cataclysm. It had all the horror and drama of a world's end, which indeed it was for the planters, the shopkeepers, the artisans, and working men of Saint-Pierre. There was even the macabre addition of a week in a fool's paradise when, after the initial fall of ash during the first manifestation on April 25 and the minor eruption of May 3 that took 150 lives, the inhabitants heard that the Souffrière, a sister volcano, in Saint-Vincent was in full eruption. Their fears temporarily allayed, they tried to return to their accustomed leisurely ways.

But on May 8, in its last living moments, the town was plainly still uneasy; for the fear that had sent thousands of Negro workers flooding into the town affected everyone. It was a religious holiday, and for those religiously inclined there was much to think about and pray for. Seventeen ships lay in the harbor, a big Canadian passenger ship among them. The people were putting on their best, their Sunday starched white clothes; mothers were plaiting ribbons in the hair of their little girls when it happened.

A wall of fire swept down from the cloud-capped mountain, over plantations and bush and on into the town, enveloping it in a sea



MILDRED CLOETE

Tourists can walk up these wide steps—all that remains of several elaborate estates built on the hillsides overlooking St. Pierre—one of the most colorful spots in the entire West Indies.

of flame. A fall of molten lava followed the flame, destroying all the ships in the harbor except one. And after this came, as if the gods wished to make destruction triply certain, a dense, heavy gas that stifled every thing that was left alive—again with one exception, the man in jail. He was subsequently rescued alive though terribly disfigured by burns.

Some ships were overturned by the fury of the attack; others were burnt. The only reason that the *Roddam* escaped was that she was anchored separately, having arrived late on the previous day and not having cleared her papers. But three of her officers were killed and seven men were

roasted alive upon her decks. The heat was so intense that iron grillwork in the city was melted and stone walls crumbled into powder.

One explanation of the disaster is that the crater was blocked with a hard core of solid lava and the force of the eruption, unable to break through it, lifted it like the lid of a kettle, on one side. That side happened, by one of those accidents of fate, to face Saint-Pierre directly. And thus the whole force of the eruption struck the city as if it came from the nozzle of a hose.

Besides Saint Pierre, one tenth of the island was devastated by the eruption and Fort-de-France



Famous Mt. Pelée, 5200 feet above the sea, is the highest point in volcanic, mountainous Martinique. When it erupted in May, 1902, 40,000 residents of St. Pierre were killed instantly. No building escaped the blast of flame and ashes.

assumed first place as the leading town of the island.

WITH an area of 385 square miles and a population of 248,116, Martinique is something of an anachronism, something of a paradox in our times. It is a rich island that is like a lovely, voluptuous woman with a dagger concealed in her hair. Needing only capital to develop it, to return its life, it marks time, waits; but capital

is afraid — afraid of Pelée, the mountain armed with fire.

It is fecund, rich with squalor; tropic disintegration merging into tropic growth; history fallen, lying in broken basalt steps, peditments, and columns; culture half hidden by flowering shrubs; and above the ruins, the green arched leaves of bananas etched black against a burning sky, the hands of fruit hanging, pointing upwards like amputated fingers.



This stone jail held the only survivor. Fed by rescuers through a slit, he later died from the effects of sulphur fumes. Pelée had been active for three months before the great outburst, but few inhabitants left the island in time.

Beneath these the heavy blossom dangles—a heavy mauve-and-scarlet breast on the stem below.

On the beach, a dinghy rests with her bow on an old cannon buried in the sand near wicker fish traps weighted with stones. There are people everywhere, many people—dark men, women, and children staring at the white visitors from another world. For Martinique is still hard of access, and, if not cut off, it is at least outside of even the slow current

of Caribbean progress. It has associations with France, the mother country, with Puerto Rico, and with French Guiana. It is loosely linked, by freighter, to America, Canada, and England, and to its neighbors by little schooners. But, like some of the other jewels set in the island string of these seas, Martinique has a quality of its own—a compound of jungle and volcano that our industrial civilization finds hard to overcome.



POLAND:

A picture document and a summary

By Adam de Hegedus

COLLECTIVE national tragedy is not a new feature in Polish history, but the dreadful experiences of the past have only stimulated the Polish mind and steeled the courage of the nation.

Ruin and Rebirth

EIGHTEEN months after the war Poland is still a devastated country, yet the outlines of a new, promising, and perhaps happy life are already appearing on her horizon. For an American these outlines are new, and for many Americans they are disturbing.

The best key to their understanding may be perhaps the old theory that desperate situations require desperate remedies. The fact that the old forms of social economy and existence are no longer possible is forcing Poland to experiment with new forms. In brief, she is trying to establish an economic system which places under public control key industries and banking, but which allows and even encourages private enterprise in agriculture, trade, and the smaller industries.

THE really revolutionary change in Poland is the agricultural reform which took place immediately after the defeat of Germany. This change, however, was a burning necessity.

It must be realized that Central Europe in general and Poland and Russia in particular had remained completely unaffected by the ideologies and reforms brought about in Western Europe by the French Revolution. Poland—and a few other countries—were thus about 150 years behind the times.

The large, aristocratic estates are now broken up and nobody can own more than 120 acres of land. The maximum acreage, however, can only be the property of institutions or serve the purposes of research or that of model farms. The rest of the land was distributed among landless peasants. The average size of the new holdings is about 12 acres in Central Poland and 25 acres in Eastern Poland. Today there are about 3,500,000 of such small peasant farms, each supporting about five people.

AND AND PEOPLE

the life of a battered, bleeding, courageous nation

photographs by John Vachon



Land and People

POLAND has a dense population. There are 135 persons to a square mile, in spite of the fact that Poland gained 40,000 square miles recently out of German Silesia and in spite of 6,000,000 Poles killed. This calls for intensive cultivation of the land and privacy of enterprise.

The Polish government, however, retains a certain amount of control over the farmer. It forces him to sell one fifth of his produce at ceiling prices—so as to ease the lot of the industrial worker—but in return the government helps the farmer, through co-operative bodies, to obtain agri-

cultural machinery, seed, and artificial fertilizer at cost prices.

The state also has a less visible but in the long run perhaps a more far-reaching influence over the privately owned small industries. These industries are wholly dependent upon the banking, mines, and key industries, which are state-controlled, for raw materials and credits.

How does Poland live today? The Poland of the weekdays, the Poles of the street, the factory bench, the peasants in thousands of little wooden houses? The country is still in a turmoil. Food, clothing, medical supplies are still desperately scarce and in the cities there

Untouched by the war, Wolwolnice succumbs to gunfire of troops and anti-government "bandits."



a flourishing black market. Lack of transportation renders resettlement of millions of displaced Poles extremely difficult. Lack of transportation also delays the incorporation of the newly gained western areas of the country. The Polish corridor, that eyesore on the map and a thorn in the flesh between Germany and Poland is a thing of the past and Poland has grown a new area between Poznan and the river Oder. The bringing of this area into harmony with the rest of the country is a vitally important job for the government. Finally, Poland is a country which lost about half of its mid-



A beggar and her child on Warsaw's main street.

Peasants of Wolwolnice frantically haul their household goods out of the burning village.





dle class, an element which ought to be very active today in the work of reconstruction. That half of the middle class had been Jewish since the 19th century, because the Polish upper classes had a traditional dislike for trade, banking, manufacture, or for the professions.

Of Poland's 3,500,000 Jews, only about 500,000 are alive today. But there is still a good deal of anti-

semitism in Poland, and underground fascists are still murdering Jews and labor leaders.

The emergence of Poland, with these advantages and troubles, into a condition of political convalescence is being watched most anxiously by the world, to see if it is possible for her to live a good life between the enormous pressures existing in Europe in this year of 1947.



← Returning from Russia by freight car, these Poles will be resettled on land acquired from Germany.

Clouds provide a majestic background for the broken walls of Glowaczow, destroyed during the war.



Recently-created Cardinal Sapieha receives a call from members of the Polish clergy.

LETTER FROM MAIN STREET

What it's like 27 years after Sinclair Lewis walked its length

By Dale Kramer

WITH millions of other native Main Streeters in the Army, I used to wonder how it would be to get back on Main Street in my own little town. And I've had a good look around since I became a civilian again. We used to hope Main Street would keep on being more and more tolerant, more aware of the rest of the world, and altogether a better place in which to live and raise a family. There was also, we knew, the chance that it would slip back into ways that were narrow.

After looking over Main Street, I'm not sure. The booster once more shakes the rafters with his oratory. The signposts at the city limits once more proclaim: "The Best Little City in. . . ." Main Street is feeling important again; and maybe it is important.

The Main Streeter has lifted his head from his hands, straightened his shoulders, and thrown

out his paunch. He pounds his brethren on the back.

Lately he has had some success and chances are good that he will have more. The men and women don't sound quite the way they did. It was war prosperity, of course, that tossed the Main Streeter's confidence to its present high point. Predictions that World War II would be without easy profits proved unfounded. The merchant was able to sell anything he could lay hands on at a good figure—often with a blackmarket boost—and competitors left for the battlefield.

Remaining professional men were assisted in the same way. Besides, it was possible to raise rents, benefit from real estate price rises and increased take from any farms that were in the family. Bank deposits multiplied and safety deposit boxes were stuffed with war bonds.



CHARLES PHELPS CUSHING

Drug store . . . department store . . . diagonal parking . . .

MAIN STREET's prosperity will probably continue. Farmers, on whom most small towns depend, have escaped heavy debt in large measure, and are in need of consumer goods. Even if prices break, Main Street can be expected to take a profit off the farmer as he slides once more into a bog.

Chamber of Commerce luncheons were not much fun during the early '30's, with the sheriff outside the door. But now there is pleasure in sitting back with a good cigar while listening to a speaker. Often he is unheard-of, but he is represented as a world-famous authority. So they sit back and hear him tell how the forces of evil are gnawing the vitals of Business.

THE Main Streeter had, however, recovered some of his confidence before the war's beginning. In

1932, bewildered, frightened, he forgot rugged individualism and helped drum his old hero, Herbert Hoover, from the White House. He marched hopefully in NRA parades and thanked Henry Wallace for the "gentle rain" of Triple-A checks.

But once able to sit up, he demanded strong meat. In 1936, no one gobbled the Liberty League's rich fare more hungrily. The courthouse and the post office were filled with federal agencies busily handing out cash. The Main Streeter shouted "dole," while ringing up a residue thereof on his cash register. Franklin D. Roosevelt's epithet, "Economic Royalist," cut him. For, while still deeply in debt, he liked to feel emotionally akin to the du Ponts.

The hunger for ending everything connected with the New Deal is now so overpowering that the Republicans are hard put to

satisfy it. Even the farm program with its cash benefits is nominated for the ash can. The only government coin the Main Streeter covets is that which enters his pocket indirectly from the veterans' program, and only because he is able to glow with righteousness in helping "those who served."

The garageman's mechanic is often paid under the GI vocational training program. So is the undertaker's helper, the insurance man's junior salesman, the bank clerk, and the printer's devil on the country weekly. A few dollars a week for the destitute undermines a free nation, but the Main Street business and professional man sees only irony in his son drawing the veteran's \$65 a month while at college, along with tuition, and \$20 a week unemployment compensation during the summer.

Willingness to smash even the farm program stems only partly from misinformation and yearning for the good old days. Much is plain snobbishness. The Main Streeter has always paid lip service to his rural neighbor, but basically he looks down on him.

THE Main Streeter almost resents the new farm machinery which has eased the farmer's toil. To hear town conversation, the farmer seldom, if ever, works any more; he is to be found loafing in town. This is one reason that the Main Streeter finds it increasingly difficult to feel superior.

In the matter of wage laborers he experiences no such difficulty. Sociologists may place the Main Streeter among the lower middle classes, but the gentleman and his lady have never been con-

vinced of their place in that category. The Main Streeter will often refer to himself as "small business" and occasionally in a burst of self deprecation as "the little man," but in truth he feels separated from the financial or industrial tycoon only in the ratio of their respective bank accounts. Consequently it is plain to him that the wageworker should remain subservient.

THE Main Streeter was always a man of considerable race prejudice, but as a result of stirrings in the cities and Congress—and perhaps the spread of Hitler's ideas by adherents in this country—there is more widespread talk of the danger of Jews and Negroes than ever before. Not long ago, a young man applied by letter and then in person to a Main Street shoe merchant who had advertised for a clerk.

He had been enthusiastically employed before revealing that he was a Jew. The merchant declared frankly that he could not take a chance on future exposure of that fact, and the deal was off.

THE Ku Klux Klan has made little headway outside the South, it is true, whereas after the next to last war it spread quickly through the Middle West and to small communities elsewhere. The Klan has a bad odor and is linked too closely with the South for Northern taste, but a more potent reason for its failure to expand is refusal of the public to see much danger in the Pope, the specter which sent Main Street scurrying 25 years ago.

There is considerable danger that the hate movements will find increasing support on Main

street. If bank deposits are threatened soon, the blame will be placed on labor, which Main Street believes is dominated and coerced by Communists.

The depression of the '30's brought about a great leveling. The top bracket, for example, has usually contained the banker and his chief employes, and the closing of their banks plummeted the local gentry to a place beside the filling station operator. The winging of these and other high flyers seemed sufficient compensation to many Main Streeters.

Since possession of wealth is the measure of social prestige on Main Street, the battle for position is deadly. The struggle to get and stay ahead of the Joneses is under way again. This is shown by the race for the biggest elec-

tric refrigerator and the longest and sleekest automobile. The black market on Main Street, often conducted by the top merchants themselves, depends on social influence as much as cash.

WHILE Main Street is divided little by differences of economic views, the scene is enlivened by opposing moral ideologies. The great social war between "moderns" and defenders of "old values" is raging hotter than ever.

Each side has gained some ground. The Moderns manage to sip highballs and cocktails, but Old Valuers have the satisfaction of forcing them to keep their high jinks under cover. The Iowa liquor law is a good example of the division of honors. Liquor may be purchased legally, but

CHARLES PHELPS CUSHING



Main Street's Town Hall, middle class homes, quiet streets are America's sounding boards.

only in state-owned stores where the customer is in full view from the street. Old Valuers may also keep an eye on sinners who order beer and setups in restaurants, for there, too, the view from the street must not be clouded.

The darkest crime of all, rarely committed, is the listing in the local newspaper of strong drink as refreshment at a social event. The bride of an Indiana Main Street attorney, wooed and won in the city, tried it not long ago with devastating results.

Because her afternoon bridge party was scheduled for Thursday, the date of issue for the local newspaper, the society reporter telephoned for a preview of details, including proposed refreshments. The young matron replied innocently that she planned a couple of rounds of Manhattans during the card playing, as well as edibles at the finish.

The shaken reporter dashed at once to the newspaper owner for clarification of policy. After sleeping on the matter, he concluded that printing of the item could be successfully defended under the banner of freedom of the press. But before proceeding he felt it only sporting to apprise the young attorney of the jeopardy in which his new wife was placing him. The young man, very much in love, had acceded to the serving of the cocktails, but the possibility of the information appearing in naked type had not occurred to him.

Meanwhile the news had leaked and telephones were crackling. A fringe of the moral element was already advocating a boycott of the lawyer, to be extended eventually to the husbands of all women who dared attend. Several

regrets had already been sent when the shrewd young man resolved the problem by sending his wife to the bedside of her stricken mother.

The same principle applies roughly to cigarette puffing. Main Street's modern woman cares little whether it is known that she smokes. Sometimes she even holds her cigarette unabashedly above the table in local restaurants. She is not above purchasing a couple of packs at the cigar counter of a local drug store. But she extinguishes her cigarette before stepping out to the street and tosses it out her car window before entering city limits.

Already the Old Valuers have lost their fight against slacks, but they will entertain hope of defeating shorts. For girls up to 15 to wear them is considered merely ridiculous, but beyond that—particularly past 20—the baring of thighs is regarded as lascivious.

Right now a sharp eye is being kept for a resurgence of something like the flaming youth of the roaring '20's. Most Main Streeters are convinced that a moral letdown follows war. But there is no sharp break with tradition such as occurred 25 years ago, for the good reason that the younger generation has gone about as far as it can.

COMPLETE return to the old Sinclair Lewis-H. L. Mencken style of Main Street baiting, while easy, would not be realistic. It would be unfair to say that the Main Streeter has learned nothing from events of the last couple of decades.

Despite his bold air, the Main Streeter is not very certain of

the future. Question him closely on the possibility of a repetition of the early '30's and a hunted look comes into his eyes. He will pump his chest, spout rugged individualism, and demand the end of all assistance from Washington. But press him, and he admits that in serious trouble he will once more ask for aid.

In Main Street's behalf it can be said that during the recent war it kept a more level head than many had expected. The previous conflict had seen the lumping of yellow paint on homes and occasional violence to "Kaiser-lovers," usually defined as those who could read or speak the German language.

Channels of information to Main Street are more numerous and broader than in former years, partly owing to radio, partly to increased reading of magazines and books. The Main Streeter is no longer an isolationist. He sincerely desires international cooperation, and he makes an effort, or thinks he does, to find out what is going on in the world.

THE fact that isolationism is outgrown does not mean, however, that chauvinism has declined. Since the nature of the Red Scare has changed, being now a real fear of a foreign power, rather than fear of radicals within, the whipping up of hysteria might be easier.

A factor on Main Street which is new and usually overlooked is the changed attitude of some protestant ministers. Hell-fire and rimstone often gives way to discussions of economic and political problems with ministers taking the lead in combating racial and other forms of bigotry.

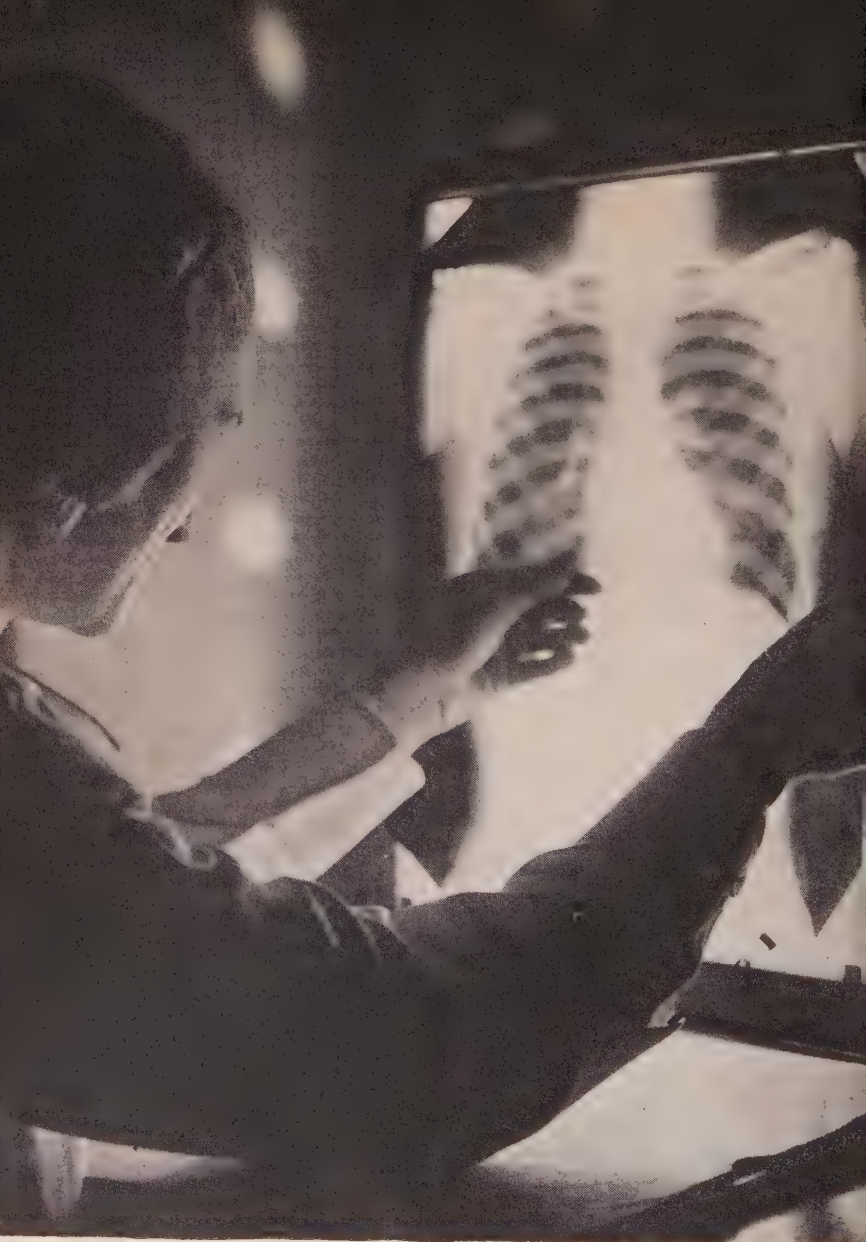
The future of Main Street opinion will depend in a large measure on an unknown quantity—the veterans. They did not, of course, find homecoming as pleasant as hoped for. Their savings were reduced by inflation to half or less, homes were difficult or impossible to secure, and the black market was an established way of life. The young Main Street merchants and professional men who closed their stores and offices upon entering the service usually find it necessary to start all over again. Returning employes find that, while their jobs are available, the wages have not risen much.

Still, things are not as bad as they might be, and the shock is cushioned by the joy of return to families and a softer existence than damp fox-holes.

Historically more influential in small towns than anywhere else, veterans could break down Main Street's old patterns of thought and behavior, or at least bring about a cleavage. Unless continued prosperity allows their absorption, they will grow increasingly restless and look upon their elderly neighbors with suspicion. That should result in an intelligent search for knowledge of what goes on in the world.

On the other hand, many have joined the American Legion, where they are subjected to pressures designed to direct their thoughts into safe and sound channels. It is too early to tell what will happen.

With growth of the great industrial populations Main Street no longer typifies the nation. Yet it is an excellent barometer for testing the effect of pressures on the middle classes, whose volatile reactions will decide the future.



THROUGH the fluoroscope, doctors observe heart fluctuations of rheumatic fever patients.

Shadow over our Children

By Herbert Yahraes

This year rheumatic fever will kill more school children than any other disease. Do you care?

MEDICAL men are diligently tracing the cause of a disease which kills more school children each year than any other illness. The subject of this intensive research is rheumatic fever. Together with rheumatic heart disease, to which it usually leads, this infection is the most common cause of death, outside of accidents, among human beings from the age of five to 19. It is the second most common cause of death between the years of 20 and 24.

There are at least as many cases of rheumatic fever in the United States as of active tuberculosis. And, like TB, RF is a chronic infection, disabling many more persons that it kills.

IN SPITE of its prevalence, rheumatic fever is a mysterious disease. We do not have a sure test for its presence. We have found no medicine either to cure or pre-

vent it. With rheumatic fever, we stand where we stood with tuberculosis before that disease was universally accepted as a problem of public health—and fought as such.

The American Council on Rheumatic Fever was set up by the American Heart Association a few years ago. It is now ready to conduct a campaign of research and education.

The medical researchers are confronted with certain facts and certain superstitions. Fact Number One is that at least 90 per cent of the cases are preceded by a hemolytic streptococcal infection. This sounds bad and often is. The hemolytic streptococcus, a chain-shaped germ of many types, is responsible for a variety of infections in the respiratory tract. Sore throat, tonsillitis, feverish colds, scarlet fever, some ear infections—all are caused by

the hemolytic streptococcus. All may be followed, within a short time, by rheumatic fever.

But comparatively few of the people who come down with tonsillitis and other such infections ever develop rheumatic fever. The Jones family has an interesting case history to illustrate this. Two-year-old Mary Jones developed a fever on January 1. Next day William, an eight-year-old, got tonsillitis. A day later, Jane, 12, came down with sore throat. The following day, six-year-old John went to bed with scarlet fever. And within 24 hours their harassed mother developed acute tonsillitis. Mr. Jones, the remaining member of the family, didn't get a thing. Only one, Jane developed rheumatic fever.

Her sore throat, which had begun bothering her on January 3, left on January 6. But three days later she was sick again, this time with something far more serious. Why was Jane singled out? If the doctors knew that, they would have the chief answer sought in their research.

FACT number two for the medical detectives is the evidence that something more than the hemolytic streptococcus is at work. If it is a germ or a virus, the men with the microscopes have not yet been able to find it.

Perhaps the cause is some man-made factor, such as poverty. There is much evidence that rheumatic fever is most common among the poor.

Dr. John R. Paul, professor of preventive medicine at Yale, traced the rate of rheumatic heart disease among thousands of students there. Among the relatively well-to-do it was 0.6

per cent; among the less affluent it was 1.0. Among persons of comparable ages who were not in college—many, perhaps, for financial reasons—the rate was 1.5.

Dr. Paul and other physicians also studied the school children of New Haven. There they found that the rheumatic heart disease rate in a public school in one of the poorest sections was one and a half times as high as in a school in one of the better districts, and eight times as high as among private school pupils.

The trouble with this clue is that it points in too many directions at once. Is it diet—perhaps a lack of vitamin C, as some doctors believe? Is it lack of fresh air and sunshine? Prevalence of rats and other disease-carrying vermin? Bad housing, particularly with crowded living conditions?

THESE leads have been run down by medical investigators. While none of them has been discarded, only the last one looks really promising. The war has shown that rheumatic fever breeds in barracks as well as in slums. Crowded living conditions are the one factor common to both. Presumably, herding persons together makes it easier for the infectious agent to spread.

Doctors have run across other clues. They know that rheumatic fever flourishes best in cold, damp climates and that it is more common in the North than in the South. Two doctors who examined several thousand American Indian school children found that rheumatic heart disease among the children living in the far North was almost ten times as prevalent as among the children living in the far South.

Those who lived in between had an in-between rate. Why coldness and dampness are contributory is an unanswered question. Maybe they weaken the patient. Maybe they strengthen the germ. Maybe their importance springs from the fact that they herd people together indoors.

THERE is one more important clue: the observation that rheumatic fever runs in families. So far, the doctors agree on the fact, but not on how to interpret it.

In a three-room flat in a slum section of a big industrial city, a child of eight comes down with rheumatic fever. The doctor examines the rest of the family, the parents and two younger children, and finds evidence of rheumatic heart disease in the father. This means that the younger children, now four and two, stand a higher than average chance of getting rheumatic fever when they are somewhat older.

What's at work in such a family? Is it a germ, carrying the disease from one member to another? If so, why do cases develop at widely separated intervals? If doctors ever find that rheumatic fever is caused by one particular germ, they might also find that there are RF carriers just as there are typhoid

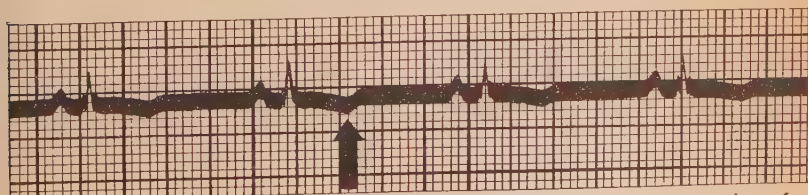
carriers—people who harbor the germs and pass them on without getting sick themselves.

Is it something in the environment—dingy, crowded—that makes such a family rheumatic? Or is some hereditary factor at work? Medical investigators find this a possibility. It would go far toward explaining why some people are susceptible to RF and others are not.

One investigator studied 122 families in which at least one child was sick. In 96 families he found that neither of the parents had had rheumatic fever. In 26, one or both parents had had it. Where the parents were negative, ten per cent of the sick children's brothers and sisters showed signs of RF. Where the parents were positive, this figure jumped to 24 per cent. Apparently heredity had a role, however obscure it may be to searching scientists at the present time.

Two other investigators conclude that when both parents have had RF, nearly all the children will get it. When one parent and a grandparent on the opposite side of the family have had it, half of the children will probably get it.

Where neither parent has had it, and all close relatives are free



THIS electro-cardiogram records the electric current originating in the heart contractions of a rheumatic fever patient. The arrow points to a T-wave, often significant. The high points are caused by ventricle contractions; the whole line shows four beats (less than four seconds).

of it, the children will probably escape it. In other words, it seems clear to these investigators that one of the things at work here is Mendel's law of inheritance. It is at work here, perhaps, as in the transmission of more obvious traits, such as blue eyes.

THE SADDEST fact about rheumatic fever is that, while we know how to handle patients so that most of them can have a decent life, we use our knowledge to benefit relatively few. Why?

Authorities give these answers:

Rheumatic fever is hard to diagnose. It has been confused with tuberculosis, appendicitis, influenza, undulant fever, and other diseases. Many cases go un-found until the heart has been damaged severely. On the other hand, many a child is branded as rheumatic on the basis of a perfectly innocent heart murmur. For help in diagnosing this tricky disease the physician should be able to call in a cardiologist or a pediatrician.

In the second place, rheumatic fever requires protracted rest under good medical and nursing supervision. Most patients should be in a hospital during the acute stage, and afterwards in a well-managed sanitarium or rest home—perhaps for months or even longer. If the patient is cared for at home, he needs an intelligent nurse, a good diet, and protection from any type of respiratory infection.

Again, rheumatic fever is a recurrent disease. Many children recover from the first attack with little or no damage, but they may be hit again and again. With proper medical care it is possible in many cases to prevent these

recurrent attacks. This is done by warding off streptococcal infections.

Finally, in two thirds of the cases, rheumatic fever results in rheumatic heart disease. It takes intelligent care to prevent the patient from considering himself a cripple. Where the heart damage is severe, he may need vocational training to prepare him for suitable work. To sum up, the proper care of rheumatic fever requires a good deal of time and money.

"Only the rich," says one widely known specialist, "can afford to pay for all the care and treatment that is needed."

WHAT happens when patients do get proper care? The following estimates made by Dr. T. Duckett Jones on the basis of a study of 1000 patients at the House of the Good Samaritan in Boston tell part of the story:

Twenty per cent of rheumatic fever patients die within ten years after their illness is first diagnosed. Fifteen per cent develop a good deal of heart disease, which cuts down sharply on their activity. But the rest—65 per cent—have an adult life with considerable physical activity. Half of this group, in fact, can lead completely normal lives.

Parents of children stricken with RF can take considerable hope from this record. They can take even more hope from a fairly new development—the use of sulfa drugs to prevent recurrences of RF. *To prevent recurrences*, not to cure the disease itself. They must be used under expert direction only.

ONE of these days, if the Children's Bureau, the American

Heart Association, and top specialists in rheumatic fever have their way, there will be enough medical machinery to care for all cases. Then every patient will have the same bright outlook that now is opened for relatively few of the afflicted.

The machinery will have to be largely public, and the present rheumatic fever programs in 20 states show how it probably will be set up. These programs have been developed in connection with the Social Security Act, which provides federal funds for states that spend some money of their own to care for their crippled children.

All states now have crippled children's programs. In 1939, Congress authorized the Children's Bureau to include children with rheumatic fever in this work, and the next year the first state program for RF children was approved. Others are coming along.

Under these programs, suspected cases of rheumatic fever are sent by doctors, teachers, public health nurses, or the parents themselves to a clinic set up by the state. If the diagnosis is confirmed, the child is given whatever care is needed during both the acute and the convalescent stages. Afterwards, he goes back to the clinic regularly for examination and advice.

But this is being done as yet on a very small scale. Most state programs reach only a few counties. Federal funds available for RF programs during the present fiscal year total \$1,250,000. However, if the problem is to be met on a nation-wide basis, an informed public health doctor estimates that we will need at least 30 times that much money. In

addition we will need many more doctors and nurses who have had special training in rheumatic fever and rheumatic heart disease. And we will need more hospital space, sanitariums, clinics, and convalescent homes.

THE answer? It's an old one—education. Out in a Rocky Mountain state a few years ago a woman applied repeatedly to the crippled children's agency for help for her daughter, who had rheumatic fever. Each time the agency told her it was not yet ready to start an RF project. But somewhere, somehow, this mother had got an idea of what a state program could do, and she kept pushing.

Her husband, a miner, was a member of a large union. After she had been turned down five or six times in the course of a few years, a union official called on the director of the state agency and induced him to see if something could be done about the woman's request.

The director finally decided to start the program. The union leader went to the legislature and helped to get the money for the plan. Then he returned to the director and asked if the appropriation was big enough.

"If you don't have enough money," the man said, "we'll get it for you."

Such a move is but a first step, but a very important one. It is a primary demonstration of what must be done on a large plan—that is, to inform ourselves and to act communally to compel society-wide support of research and therapy in rheumatic fever cases that injures so many of our children.

Department of the Interior

HIGHER EDUCATION

Before we were married, my wife had a servant named Corinne, about whom I hear a great deal. My wife undertook to teach the girl to read and write. Selfish object: so that Corinne could understand and take care of shopping lists. One day the girl, who had been listening to the radio, happily announced that she had learned to spell "New York."

"Let's hear," said my wife.

Popped Corinne proudly: "W-E-A-F—New York."

—John Stuart Martin

ELECTRIFYING THE VOTE

The essence of pure democratic voting is that the qualified citizen register his will with respect to any proposition directly. We have all too easily assumed that this has become impossible.

It isn't. Direct yes-or-no voting could very easily be reestablished by electrical voting. All the voter would have to do would be to throw a lever or press a button and the machine would do the rest. The process, properly set up, would be tamperproof. The matter of expense can be brushed aside—the cost of half a dozen modern battleships or a stockpile of atomic bombs or jet planes would easily outweigh it.

If anyone raises the objection that there are many issues that should not be referred directly to popular decision that is simply to reveal that he does not believe in pure democracy. Such disbelief is obviously anyone's right, but it

should not be camouflaged by mouthings about the virtues of democracy and laments over its alleged disappearance in the United States.

—Henry Pratt Fairchild

PERFECTION ON THE MOUND

If the '47 baseball season should by any chance produce a perfectly pitched game—a no-hit, no-run, no-man-reaches-base game in which only 27 batsmen face the winning hurler and all of them go down in order without a single man's touching toe to first base—it will have witnessed one of the rarest events in sports.

No-hitters are rare enough, but the *perfect* no-hitter happens about once in a generation. There have only been four in major league history, and even one of those is disputed. It is harder for a pitcher to achieve than for one man to make a hole in one, bowl 300, and break the world's mile record, all in the same day.

The last time it was done was just 25 seasons ago when a tall, lanky rookie wearing the White Sox uniform took the mound against the hard hitting Detroit Tigers on April 30, 1922. His name was Charley Robertson; he was fresh from the minors and few players knew anything about him or what he had. But the Tigers found out that day.

Every batter who faced him, including Cobb, Heilmann, Manush, was powerless against him. He allowed not a single hit or base on balls and his team mates

played errorless ball behind him. The crowd was stunned as the last out was made. Hard-boiled sports writers sat open-mouthed. White Sox moguls, recently crippled by the betting scandal, threw their hats in the air at their new find. Robertson had done what many of the greatest

pitchers—Walter Johnson and Christy Mathewson among them—had failed to do.

But the story ends sadly. After that one perfect performance the sensational rookie never shone again. Soon he was back in the minors, lost in obscurity forever.

—John Durant



"Suppose this time I fool you fellows and don't bunt!"

Point Lobos

A lonely sanctuary on the California coast

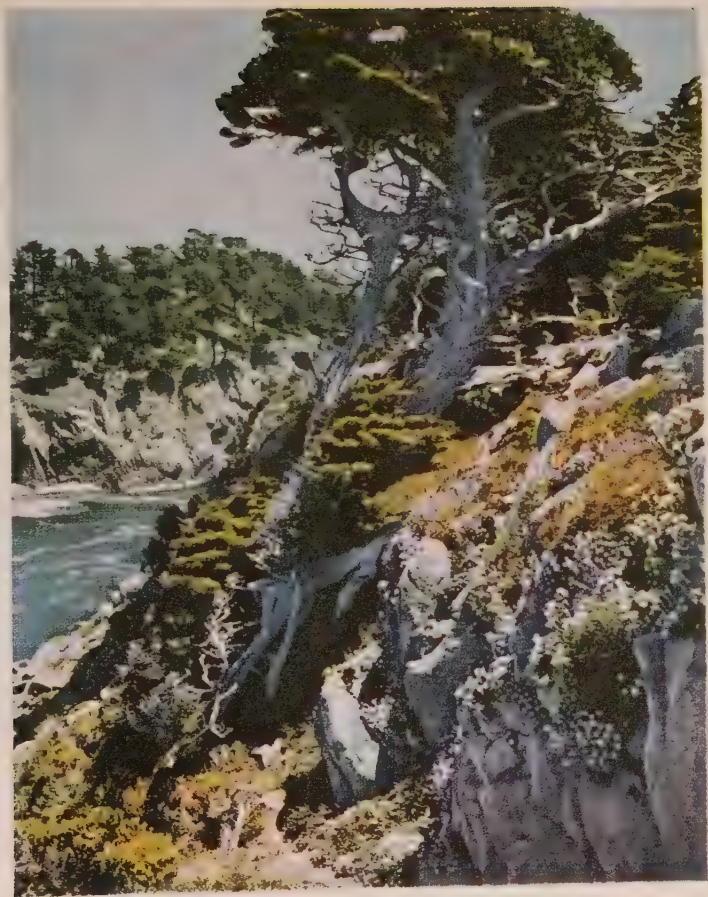
Photographs by Will Connell

with lines from the poetry of Robinson Jeffers

... the sea beyond

Lobos is whitened with the falcon's
Passage, he is here now,
The sky is one cloud, his wing-feathers hiss in the white grass,
my sapling cypresses writhing
In the fury of his passage
Dare not dream of their centuries of future endurance of
tempest. (I have granite and cypress,
Both long-lasting,
Planted in the earth; but the granite sea-boulders are prey
to no hawk's wing, they have taken worse pounding,
Like me they remember
Old wars and are quiet; for we think that the future is one
piece with the past, we wonder why tree-tops
And people are so shaken.)

Granite and Cypress



These granite gorges, the wind-battered cypress trees blacken
above them,
The divine image of my dream smiles his immortal peace,
commanding
This old sea-garden, crumble of granite and old buttressed
cypress trunks . . .

from *Point Pinos and Point Lobos*



It is true that, older than man
and ages to outlast him, the Pacific surf
Still cheerfully pounds the worn granite drum;
But there's no storm; and the birds are still,
no songs; no kind of excess;
Nothing that shines, nothing is dark;
There is neither joy nor grief nor a person,
the sun's tooth sheathed in cloud,
And life has no more desires than a stone.



The stormy conditions of time and change
are all abrogated, the essential
Violences of survival, pleasure,
Love, wrath and pain, and the curious desire
of knowing, all perfectly suspended.
In the cloudy light, in the timeless quietness,
One explores deeper than the nerves
or heart of nature, the womb or soul,
To the bone, the careless white bone, the excellence.
from Gray Weather



Gray granite ridges over swinging pits of sea
Hard green cutting soft gray

from Point Pinos and Point Lobos

FOLKLORE ON CANVAS

George Biddle and William Gropper seek fresh themes for painting in the poetry and legends of the American people

By Gordon Ewing

SAYS George Biddle, of the Philadelphia Biddles: "In American song and legend I found dramatic episode, diversity of type, psychological characterization, emotional tension, and the moral or social theme in counterpoint."

Says William Gropper, of the Lower East Side Groppers: "My interest in folklore grew out of admiration for a young and virile people. America is a big country, and the men who won it were big, tough, hard-fighting, riding, digging, cussing, shooting men. In their song, poetry, and legend, we American artists find a free, honest, and living expression of America."

Biddle and Gropper are but two brilliant specimens of a whole generation of Americans who began to search for their natural roots as a consequence of the social upheaval of World War I and the depression.

Writers and artists in particular began digging into the New World as they had never done before. Many of them did not go beyond the top layer, the contemporary scene, as innumerable

paintings, novels, and books of reporting testify. Others struck down into the strata of history. Inevitably, some came across the veins of folklore and found there materials from which to put together the image of America seen by generations of inhabitants.

The veins are rich, for folklore is, in one succinct definition, "an expression of the land, the people, and their experience." And the American land is vast and its people by no means so standardized as they have often seemed to casual observers. Creative people, including the two painters whose work appears on these pages, have found in America customs, tales, sayings, songs, and beliefs of almost endless variety.

Some parts of this body of folklore are, of course, imports brought here by the people who settled the continent. The best-known examples of these are ancient ballads of the British Isles which have been kept alive in several regions of the South and now are enjoying renewed popularity through the performances of Burl Ives, Richard Dyer-Ben-

"Oh! that flagon! that wicked flagon!" thought Rip. "What excuse shall I make to Dame Van Winkle?" So Washington Irving presents Rip Van Winkle's awakening from his long sleep. William Gropper's conception of the famous scene reveals the artist's characteristic intensity.

Courage, devotion, and consciousness of the struggle between good and evil appear in Biddle's interpretation of "De Angels Rolled de Stone Away," the refrain of a well-known spiritual. For the creators of Negro religious music, the story of Christ's resurrection symbolized the end of bondage.







"... marvellous tales of ghosts and goblins and haunted fields and haunted brooks and haunted bridges and haunted houses, and particularly of the headless horseman, or galloping Hessian of the Hollow..." Inspired by such lines from "The Legend of Sleepy Hollow," Gropper's *Headless Horseman* typifies his use of simple detail, vigorous forms.

net, and Susan Reed. Other sources are native: Indian legends, for instance, or the tales of Paul Bunyan. And much American folklore is a combination of both elements; the impact of Christianity and slavery in a new land upon Africans produced the superb poetry and music of the Negro spiritual.

Among American painters who have found fresh and parallel themes in folk sources it would be difficult to name two whose backgrounds differ more than those of George Biddle and William Gropper. The two men began life—Biddle in 1885, Gropper in 1897—in separate worlds. The older man had a name to lose, the younger a name to make.

THE BIDDLES of Philadelphia have been as continuously successful in American life as the Adamases of New England. General Washington designated an early Biddle to receive the swords of defeated Hessian officers at Trenton, President Truman dispatched a much later Biddle (brother of George) to hear the cases of another group of defeated Germans at Nuremberg.

Between these two events the American Republic grew up and a large number of Biddles helped to shape its government, law, and finance. But not its art. To carry the family colors into this field George Biddle had to overcome the skepticism of critics and of the public: men of his position were likely to be art dilettantes.

Biddle had already made a brief excursion into the world of art when his poor health caused his withdrawal from the Haverford School. To get out of doors he began studying with a graduate

of the Pennsylvania Academy. His strength and spirits revived so noticeably that in a few months he was sent to the celebrated school at Groton, Massachusetts. There he met a sixth-former named Franklin D. Roosevelt.

Biddle followed the well-worn path from Groton to Harvard and in 1911 took a law degree. But in the same year he went off to Paris and enrolled in the art classes at Julien's. Proof that he had found his real vocation is the scope and vitality of his subsequent work: paintings of wrestlers and cowhands; of the face of Tahiti and Cuba, the United States and Europe; of Americans fighting and Americans building.

In the early '30's Biddle developed the theme of social protest. The depression, he declares in his autobiography, exercised "a more invigorating effect on American art than any past event in the country's history." It did so, he believes, by forcing artists to band together for economic survival and to strive for closer ties with their fellow citizens of all occupations.

Shortly after his friend of Groton days moved into the White House, Biddle wrote to him, offering a suggestion that presently ripened into the Federal Arts Project. Whatever else this plan achieved, it caused a great many artists to reach down for their American roots. The process is still going on, having gained impetus from World War II.

TO WILLIAM GROPPER'S parents Manhattan's lower East Side, like the Europe they had left behind, must have seemed like a combination of importunate landlords and wages that didn't go far

enough. Young Gropper often took a roundabout way to and from school so that he might bring his mother stacks of rough garments from the sweatshops and later deliver the finished coats and pants. He was able to make a beginning in art only because his marked talent for drawing won him a scholarship at the National Academy of Design.

But the Academy insisted that its younger students spend a long apprenticeship painstakingly reproducing innumerable plaster casts. Gropper, believing that his youth would give out before the casts did, moved rapidly from one to another, and in record time turned up among the advanced students. Two weeks after ordering him back to his proper station, the school authorities discovered that he had promoted himself to the life class. They dismissed him.

Undismayed, Gropper went on to the Ferrer School. Two of his teachers there were Robert Henri and George Bellows, men who did much to naturalize American art and give it new power. Then and for many years thereafter Gropper was chiefly interested in drawing. In 1919 he became a news cartoonist for *The New York Tribune*. He stayed only a short time with the newspaper, but for more than 20 years his cartoons—satirical, broadly humorous, savage, always effective—have appeared almost daily in a great variety of periodicals. (One of the prewar exchanges of sharp notes between the United States and Japanese governments dealt with a Gropper drawing of the then sacred emperor-deity.)

Gropper has also found time to become one of the country's best-

known painters. The simplicity and force of his work, animated by his lifelong hatred of man's exploitation of man, have given him a wide public.

Gropper, as we have noted, chooses folklore themes because he finds in them a clear expression of the American spirit. Biddle's explanation is similar, but he also had a more immediate reason for seeking new subjects in folk story and legend. During the war he did a mural for Brazil's National Library on the theme of "fascism in contrast to a philosophy of education and democracy." In the Mexican Supreme Court Building he did another dealing with "creative life in contrast to war's destruction." Then he sketched American soldiers in North Africa and Sicily, attended the Nuremberg war crimes trials as an artist correspondent, and worked in the DP camps in Germany.

"After all this," he declares, "I felt it impossible, at least for a while, to return to the aloof abstraction of still life, landscape, and other easel painting."

Despite differences of style and specific subject, Gropper's *Rip Van Winkle* and *Headless Horseman*, and Biddle's painting based on Negro spirituals have a common aim: they seek to interpret, not to illustrate. In the tales and songs of the early settlements and battlefields, the railroads and logging camps, the ranges and plantations, both men see a faithful image of the American past. Avoiding the double trap of sentimentality and historic literalness, they capture that image for those who will make the American future.



"John took highest honors in making lettuce and tomato sandwiches."



When middle-aged suburban gardeners, male, get down to fertile mother earth, embarrassing thoughts sprout, puns grow wild, and imagination turns tropical

"You ought to do more work in the community garden," the neighbors said. "It's so good for you." Wyncote was amused. Fortunately, being amused was a habit of his; but only one of his many habits.

Things grew rank that year. It was a strange summer: day after day of rain, fog, drizzle, and exhausting humidity. It was caused by an obstinate Bermuda High, the newspapers said, which kept the northern seaboard under a heavy blanket of depression. The Weather Man called it "an air mass boundary that shows little or no movement." Wyncote got curious and bought a barometer; he was amused when the humidity needle went clean off the scale, above 100 per cent. Radio crackled with static. Men's minds crackled, too. The brain is just

as delicate an instrument as a radio. That's why they have such trouble in getting together.

Rain fell straight and solid, didn't even bother to comb itself out into crystal thread; sluiced in cataract down ivy and rose-creepers, poured over window-sills. Thunder idled round and round but never broke loose. Steaming swathes of mist were followed by brief blazes of jaundiced sunshine, too yellow to dry anything. Flies and mosquitoes stayed indoors. Spiders were too smart to build their webs and looked haggard. There was mould on books and clothes. Wyncote's razor blades grew rusty in spite of vaseline. Mrs. Wyncote's little stock of cocktail biscuits, kept in case the Jenkinses should drop in, collapsed into spongy crumble. Everyone was limp and peevish.

Life



By Christopher Morley



Illustrated by Lucille Corcos

The air mass got so heavy, commuters said, the trains could hardly push through the tunnel into town. The crispest seersucker went draggle before smart young Mrs. Jenkins could meet her friends for lunch at the Circus Room in a Fifth Avenue store. "Honestly," she said, "I looked so blowsy people mistook me for the clown." A long friendship was bitterly wrenched when Mrs. McLomond served the Jenkinses a hard-fought cheese soufflé and Mr. Jenkins thought it was Yorkshire pudding.

Electric irons short-circuited, and several wives were worse shocked than they had been for years. The village laundry couldn't get anything dry and put up a sign **OUT SHOPPEN BACK WHEN**. Cars that halted uphill couldn't start again, car-

buretors were so condensed with wet. The climate just lay around on the ground waiting for people to kick it. The Jenkinses, people who would have had fun together in the Alps, bickered a good deal at sea level. When Mrs. Jenkins brought home an armful of costly slick-paper milady-type fashion magazines, the rain poured through an open window and melted them into solid unopenable slabs. Mr. Jenkins roared with laughter and said that would never happen to his *Quarterly Journal of Embryology*. Afterward he was sorry; because he was sure Mrs. Jenkins woke him up when he hadn't really been snoring.

EVERYTHING grew wild and tropical that July. But Wyncote continued to work in the garden. It was

so good for him. He larded the earth like Falstaff, and wondered if it was wise to take so many salt tablets, but he liked the name on the label: Sodium Chlorate Dextrose. Dextrose, he presumed, meant turn to the right. He was allowed only the humblest jobs in the community farm because he was an agricultural nincompoop; humbly he muttered his way on all fours along endless rows of root-crop, rescuing baby carrots and beets and artichokes from upas jungles of weed. He mumbled asinine sayings to himself: "If I forget thee, Jerusalem artichoke, may my dextrose forget her cunning." Sometimes, blinded with sweat, brain gorged with blood from creeping posture, he would fall prone in a steaming furrow and cry, "A garden is a lovesome thing, God wot."

Sultry afternoons of glebe and tilth, he would see, through shortsighted sweat-brimmed eyes, dim shapes of other gardeners at work. He wondered what they thought. His own wretched small-talk with himself was a despairing effort not to think. He knew too well, geotropic soul, whither

his notions were plunging. A garden is a carnal place, God wot. Vegetables with their innocent and shameless forms, so divinely accidental yet so full of fleshly anatomy—he turned embarrassed eyes away from crotched carrots and buttocky melons and glandular eggplant. In that hot and burgeon season what appalling vitality, what thrusting struggle to exist and bear and repeat. What animal attitudes in the demure women of his colleagues. They came, shirt-shortened, in the royal flush of afternoon, to glean for their household supper.

The parallel lines of a garden always put the mind in Rhyme. He saw an unconscious desirable creature incredibly crimped into soft slopes of leg. He resumed his task, happy with doggerel. Baby bye, hip and thigh, he sang to himself. They crouch and squat, they bend and sweat, devoted squaws to the vegetable cause, I bet they'd do almost any sin for the sake of sufficient vitamin. Then, in prose, he wondered if the whole patriotic community, now eating so much vitamin roughage for the first time,



was excessive with germination? Were they all hypoed with corn-sugar and beet-iron and watercress riboflavin; the riotous carbohydrates of the parsnip, the pungent aphrodisiac of caraway, dill, and wild thyme?

Maybe he better lie down in the furrow and pretend to be fast asleep, like Little Boy Blue.

WHEN observant men, particularly at a Time of Life, get down to earth and look at it, jeepers, what dread parable it shows. And beauty everywhere! The tiny blood-thread of the beet; the blue and scarlet blossoms of the low or lofty bean! Who but the bean-picker knows profusion and plenty? Even its names are provocation: White Marrowfat, Red Kidney, Kentucky Wonder. Suppose, he said madly to himself, suppose under a pleached alley of Kentucky Wonders I met a lady with bluegrass vowels of compassion? And the promiscuous groaning bees double-bed with basil or blue borage. The lady-bug panniered in red; the blonde potato beetle; the pubic tassel of the corn. No wonder there is such a catalogue of herbs and vegetables in the *Song Which Is Solomon's*. How frightfully dishonest, he griped, are the translators' chapter headings in the Song. How annoyed Solomon would be.

He retrieved his glasses, tied a spare handkerchief round his head to absorb moisture, abated anxiety by moving off to chores in other parts of the field. With filleted brow he looked rather like Catullus or any Roman erotic poet. And when he had pulled up and tightened his falling trousers (Mrs. Jenkins noticed) he was quite à picturesque figure.



He dusted wood-ash on the flannel leaves of eggplant (or aubergine), he sniffed pungent over the tall spires of the encyclical onion. Afternoon, which had been tense with heat and anguish, suddenly breathed deep from some lung of sky. A clarifying breeze whittled dryly in the edged blades of corn.

He had pretended to be pleased by all these primitive senses. Actually he was appalled. Mirth was his poor only armor; it is not to be trusted. Some of the other gardeners were jocular, too. Stout vestrymen, they also knew Solomon well enough to parody. "He sheweth himself through the lettuce," they cried to each other among the black-Seeded Simpson, or when Big Boston failed to head. There were gags worse than this. But the wise do not sneer at play upon words. Sometimes it averts play upon thoughts.

Late by lack of sunshine, the

corn wasn't ripe to pick. Perhaps that purified him. Wyncote went back, chastened, to his line of duty. Meanwhile Mrs. Jenkins, riper than the corn, had made progress. She was editing a parallel row. How lovely she was. Soon they would meet; head-on, which is the worst of so many human meetings. What should he say? Sprawling modestly among the foliage he hitched up his pants again. She wouldn't need to, he thought bitterly; she had visible means of support. Besides, pants were too generous a plural for the narrow clout she wore.

He had weeded his way over the hilltop, over the watershed, and was on the downslope to the hollow he called the Slough of Despond. There, in a sag between two breasts of land, rich wet alluvion simmered; weed and parasite and strange warty growth flourished. Inflammation of sun turned it to proliferous mire, cracked with scaly surface paste where purslane fought No Surrender with the virile rhubarb.

There also, behind the shabby tool-shed, the abominable compost pile exhaled steaming corruption. It stank. There, defying our effete and puny genes, Demon and Demiurge staked all for win, place, or show. Wyncote always dreaded his task in that gulf of genesis where, as he said (only to himself), Behind was Let Loose. It was planned for helots and horror. In its thick morass anything grew strong and deep.

Deracinating with haul and twist the rubbery inertia of purslane (Puzzly, his colleagues called it), he coached himself by quoting Keats, probably *Endymion*, something about pipy stems. He was ashamed that a man of 50 had

to get help from a poet of only 25, but that was one of the nice things about Wyncote, he could still be ashamed. Not of what he had done, but of what he hadn't. He had been scared by civilization, but he hadn't been cancelled. He always braced himself for the Slough, because there he really fought.

I must keep myself strong for the Slough, he said (ridiculous!) as Mrs. Jenkins came nearer. He peered down the reeking slope, where a great hedge of wild-grown sumac and sassafras ended the community terrain. The poison sumac, always damnably precocious, already in July announced what no one wanted to know, serene and sweetheart autumn. Even in the month of Julius (also murdered early) the clear green sumac was tipped with scarlet chevrons, like non-com Marines. It was, as they say backstage, First Warning. Wyncote had had it too.

He and Mrs. Jenkins met, in echelon; he in the masculine crawl and she in the pelvic squat. There was nothing between them but a file of puritan Swiss chard. Her thighs shaded brown paling to ivory; her bosom depended in perfect mammal catenary. Her eyes were clear; his, bloodshot blar. She perspired sweet; he was foul with heat. They paused and looked hard, across the chard.

He read (he was a good reader) something anti-Jenkins in her gaze. Helvetic neutrality grows high and rugged, but they might have leaned across it. It would have been a delicious sweaty kiss, slippery-sweet, and no harm to anyone. But he was ruined by the Song of Solomon, which had been in his mind.



He wanted to say something about roes that are twins and was too bashful. So he said (and it's always a mistake to say your own thought instead of one of Solomon's), "I am the scapegoat of the Lord; I am the Vacuum Abhorred."

Quite rightly, she abhorred him. She went on weeding south; he went on weeding north. Once he stopped and looked back. She was graceful, though plumply grooved, from behind.

WHEN he got down to the Slough he lay on his belly in the mud, gripping filthy purslane with both hands, and through the hedge he saw Cybele.

Cybele, whose family came from the re-sodded Pontine marshes, took sloughs as they came; she might have come from Catullus, or Ovid, or even Horace—any of the textbooks that the boys aren't supposed to take seriously, and fortunately don't. She lay in a hammock with her feet higher than her head, though Wyncote, looking through the hedge from below, noticed more hummock than hammock. She was reading a newspaper cartoon strip, and she was just as delicately shaded brown to gold to milky as Mrs. Jenkins, and just as bifurcated as any carrot. It is amazing how

translucent a hedge can be if you look fiercely at it. Wyncote, leaving purslane to wrestle with rhu-barb, crept like a Ranger toward the shrubbery and groped into it. Through the leaves, dripping the bronze of sunset, he gaped and prickled like a faun.

Unconscious Cybele swung softly to and fro, coolly ungirt in her cotton wrapper, moulding the thin hammock with fulnesses unrestrained. She was absorbed in *Terry and the Pirates*, regardless of worse piracy near by. The fecund Slough, cooking with creation, seemed to swing too. Wyncote lay there, caught in some horrid earth rhythm: pulsated, frustrated, ill-fated. Perhaps he blurted shameless petition to some furious lurking god.

CAME August, hot, clear, and consummate: month of fruit and foreboding; month of grace exhausted and power leakage. On August, month of the golden beryl, season when restraint seems sterile, month of harvest, war, and peril; cooling dusk on the mounded hay, month nine months ahead of May. The August moon, first shrivelled and thin (like an empty vineyard skin) gently filled its bladder hollow with a glowing cider-yellow.

The conscientious gardeners of the parish, weary and tanned, met in their screened porches and put on again with beer and pretzels the adipose they had swinked off in the field. They made their little jokes, perhaps to drown out the sorry tinkle of the crickets who had suddenly tuned in. "*Lammas fide*," said the rector, who knew more about Anglican festivals than was quite seemly in a Republican, "*Lammas*, that

means Loaf-Mass, to sanctify the harvest loaf."

"A good loaf is what I need," said poor Mr. Jenkins, who had been terribly pooped all summer.

"Lammas is quarter-day in Scotland," said Mr. McLomond. "Even the Scotch have to pay their rent."

They were all pleasant, cultivated people; the husbands rich in the varied lore of grizzled com-muters and vestrymen; even the wives had almost all been through junior college and would bandy a highball or an allusion with anyone.

"I'm all for Yeats and seven beanoes," said Phoebe Jenkins, "but I can't swallow any more chard. There's a legume that really girds its loins for production."

"Chard is not a legume," Mr. Jenkins contradicted. "Legumes are pulse, viz., peas, beans, and lentils. Also Yeats had *nine* bean rows, not seven."

"Bilbo!" exclaimed Mrs. Jenkins. (This was a coinage of their own to express absolute rot.) "It makes me furious when you say viz. Academic jocularly."

Wyncote was glad anyhow that the conversation was not going to turn on loins. He stuffed a handful of salted peanuts to prevent himself from making a catalytic wisecrack about Sir Loin and Lady Loin.

THEY agreed to plant fewer greens next year. "By the way," said someone, "there's been complaint from folks down the road, Sibby Campagna and others. It seems the compost pile smells very strong this year."

Indeed it did. In that heat-fermenting hollow the great mass of stewing sirupy stuff exhaled

a haze of fume and flies. It was nature joyriding toward corruption, an orgy of organisms rede-ploying.

Wyncote and the rector walked part way home together in the chanting summer night. Beer, Wyncote thought sadly, was hardly a strong enough drink to muffle the Gregorian plainsong of the crickets. The rector, whose anxious profession it was to see that nothing anywhere got out from under decent wraps, remarked that the parish had been plagued lately with an almost hysterical barking of dogs.

"Dogs are such prudes," said Wyncote.

"No, but really; there has been an almost Hound of the Baskervilles baying among the woods. I wouldn't say this to everybody but it's quite ghastly, almost a human note in the dreadful yowling, like a woman in her agony, but awfully not quite."

"Maybe not Baskervilles, but Durbervilles."

"It's not even funny," reproached the parson, who had children in high school and was adept in their language. "And have you noticed the signs about mad dogs? We don't dare let our pooch out any more except on a leash. I have to prepare my sermons while I'm walking the dog, and sometimes I'm afraid I get too realistic."

No one ought to be let out except on a leash, thought Citizen Wyncote. Wisdom is better than rabies. But he felt it wise not to say anything further.

Because something was plainly wrong. It wasn't just the scandal-wail of dogs. Their trouble might have been the record multiplication of fleas in that humid

weather. Each flea had to get along with a smaller section of dog, and so bit harder and faster. But everything was in excess. Japanese beetles, in disgusting pairs, tore open the pink linen of the rose. Moths, agnostic of crystal parabenzine, went nursing in grocery cupboards. Flies were prodigal of their specks. Books swelled and bloated on the shelves so that reviewers couldn't look up quotations. People spread and stuck to their seats in trains and were carried past the proper stations. Caravans of nervous ants, moving their larvae to dryer apartments, climbed what they thought were glossy white birch trees. They were legs; Mrs. Jenkins' and others less Duncan Phyfe. Bees, always shortsighted, got confused and cross-fertilized at random, so hydrangeas and phlox changed color. The hawthorn shed bald. Mrs. Jenkins piled her hair on top of her head to keep her nape cool.

Wyncote noticed all these phenomena, and stayed indoors. It was his business to notice things and not do anything about them. He had been busy all summer on a four-line epigram, which he planned to offer to a publisher for publication in 1948. So he was happy and absorbed, sitting X-legged by his bookshelves trying to pull out a copy of *The Golden Bough* that had mouldered tight against *Whitaker's Almanac*, when Jenkins came in. Wyncote got out a bottle and mixed a Rum Collins.

"Make it more rum than collins," said Jenkins sighing. "My wife's away visiting I need a night's sleep."

Wyncote wondered how that sentence was punctuated. Then

he wished he could get over the habit of wondering about things that weren't comma unfortunately comma any of his affair.

They talked a while, as mannerly neighbors, about casual nothings. "I haven't got my fuel coupons yet," said Wyncote. "It's going to be a tough winter."

Kapellmeister crickets outside, rubbing their wiry shins, shrilled damning assent. How fortunate, Wyncote thought, people don't talk about what life is really like. They leave that to the compost piles and crickets. He noticed he had given Mr. Jenkins his drink in the toothglass with which he had been rinsing his retiring gums. How did it get out of the powder room? At any rate, I haven't completely failed in life. I have a powder room.

"Let's not be morbid," he exclaimed, to keep the conversation going, as Jenkins looked very sombre. That was a wisecrack he often found useful when talk went sour.

"That's exactly what I am," said honest Jenkins. "Have you seen what's happened in the Garden? —Say, get me another drink, this one tastes like peroxide."

Wyncote felt guilty. He hadn't been down to the field lately, since the planting and weeding jobs were over.

Cheered by the fresh drink, Mr. Jenkins tried to explain. He was wary and waggish as a disciplined vestryman should be. He beat around the bush like the chapter headings in the Song. He spoke of the howling of dogs, the strange odors that drifted through that part of the woodland, shouts and screams that had been heard, apparently in a foreign language.

"How do you tell what language is a scream?" asked Wyncote.

Jenkins grew more detailed. Mrs. Jenkins was away and he began to feel the vigorous frankness of the husband whose wife is out of earshot. Wyncote feared he would have to hush him down, for Mrs. Wyncote, who had gone upstairs, might not be asleep. How husband-like, he thought. The old boy doesn't care whose wife overhears as long as his own doesn't.

"Phoebe was terribly upset," Mr. Jenkins was continuing. "She came back that night pale as a sheet. She swears she was chased."

"Chaste?" babbled Wyncote. "Why, of course. I never saw a more virtuous group of women anywhere."

"You fool, C-H-A-S-E-D. Chased down by the Copse."

The Copse, in the picturesque realtors' jargon of that section, was the winding wood road that led past the community garden, but Wyncote still misunderstood.

Jenkins finished his glass. "All right, you think I'm inventing, come down with me and have a look. The moon's bright, and if you want to see something really bestial bring your flashlight. Mac and Bill and Steve and I have been watching it. I'm telling you, it's appalling, polluted, unspeakable, disgusting, and incredible. Bill says it looks like soandso, and Steve says suchandsuch, and Mac won't commit himself. Thank goodness, it's down in the Slough you're so fond of, below the beans and cucumbers, so we've kept the girls from seeing it up to now. But the way it's growing they're bound to notice. Bill says he don't dare call the

usual harvest meeting, someone might mention it."

MOONLIGHT is austere and sanative; a sort of cosmic peroxide. What might be abominable at 1500 hours can be sweet and commendable at 2300. What a difference eight hours make. The mass of sprawling cucumber vines, the long-cast tracery shadow of polebeans (like a music score), the low demijohn moon, softened with merciful crisscross the Gruesome Thing, but certainly there was a foul smell, and a dark shape seemed to slip off behind the roadside trees. A dog near by began barking on its top terrified note.

"Maybe it's Bill's melons," suggested Wyncote as he slipped on a soft one. "He's too lazy to harvest them, and they always reek."

"Whatever it is, I take a dim view of it," said Jenkins.

Wyncote turned on his flashlight, and turned off again quickly. "A dim view is best," he said. Between decent earthly furrows was a disordered trampled area; and weltered and half revealed in steaming mire a strange suggestive growth.

"Certainly nothing to write home about," Wyncote said presently. "I see what you mean, but it doesn't look like that to me."

"And what do you think of these?" asked Jenkins, pointing to pairs of dark prints deeply sunk in the soft slope.

Wyncote did not hesitate to quote Old Testament to a vestryman. "Maybe the Daughter of Zion in a garden of cucumbers," he said.

"Appears to me somebody working in this garden had a mighty dirty mind," said Jenkins.



"Somebody put a hex on some unconscious vegetable and turned it into a hellish symbol. I'm going to call a meeting next week, stag, without asking the girls to come, and see what can be done. It might be better just to have the older men. The young fellows are too gabby."

That was easy for Jenkins. His wife was away in the clean granite uplands of New Hampshire. The other women wanted to know why, for the first time in the history of democratic glebing, they were barred. Several of them were astonished at this time when their husbands offered them travelers' checks and a holiday with the children Upstate. But no woman accepts a holiday that someone else thinks up for her.

Several days of secret negotiation had to pass before the men could get together privately. Strange things were said in the brief moments when they met, pushing through the train in quest of seats, buying newspapers at the depot, or sneaking singly into the village liquor store. (None wished to know if his fellows had equal favor in the fluctuating supplies of Scotch and gin.)

"Everybody says, it don't look Like That to me," said Bill when the Horrid Thing was mentioned. "They're hypocrites."

Mr. Jenkins wondered if maybe the rector could exorcise it with a ritual; he had read of that sort of thing in Conan Doyle. But the rector, shrewd man, chose that week to go on leave. Meanwhile, the Thing grew strong and sultry behind the cucumbers. Even Cybele must have noticed it, for her hammock lay empty, in flat suspense. The Augustan sun thick-

ened the Slough to a curdled emulsion in which bubbles of gas rose and puked. Edged with putrid moss the shape was still inchoate, formless, and therefore visible in all forms forbidden and obscene. The committee unloaded a truck of straw upon it, but even this harmless covering made slow quiver and heave.

It was the beginning of September, the very dark of the moon, when they met, like conspirators, at Jenkins's house to equip. The suggestion of engaging a plane from the Army, to drop a precision bomb, had been voted down. The story then would be out, and very damaging to real estate values. Wyncote, who felt a peculiar, but top-secret, responsibility, had procured the largest flame throwing weed-killer on the market and a mask. The others brought rubber boots, pitchforks, sharpened spades, quicklime, lysol, anything they could think of. The women, of course, by now had a pretty good idea of what was going on, except that they visualized the Thing even worse (and quite different) from fact. They shut themselves in, with wax ear-stoppers and the loudest comedians they could find on the radio.

The weather broke that night. Perhaps it was the first of the September hurricanes. Just as well, for the thunder helped to cover those awful whinnying screams. The electrical convulsions were severe. Lights and telephone service went askew. Everyone got wrong numbers. Seen in terrifying flares of lightning the Thing appeared to have taken on animal life as well as vegetable. It wallowed, groaned, and struggled, and a strange pip-

ng whistled in the wind-strained trees. The committee were all a little berserk; they had primed with strong drink and were surprised to find themselves shouting and singing wildly as it attacked. A frenzy possessed them; each seemed to identify this Unspeakable with whatever had troubled him worst in a hard life. They uttered names and cries mercifully never recalled. Wyncote, bawling some impromptu incantation, rushed in pumping the flame thrower; he sank waist-deep into the unholy Slough. Living rubber ropes of fighting purslane, or some other kind of vile tentacles, nearly dragged him under. They cut and slashed and slogged. Then the gassy flame poured on. There was a meaty cindering sizzle. Night split with screams, a great tree crashed across the road. Cybele and her kin, beyond the hedge, might well have wondered what hell was happening; but like all good Latins in thunder they were humped under the mattress telling beads.

There was silence, and relief, until the crickets resumed their methodical metro-nome dirge. Perhaps, mopping themselves, some of the gardeners felt that what had begun as a sanitary squad had ended as a murder gang. But man never really regrets anything that makes him sweat. They piled rocks on the place, trudged back the sylvestered way.

Mrs. Wyncote, completely foxed by the whole episode, had night-caps ready for the men when they came back, drenched and mired and smelly. As usual, she thought, Mr. Wyncote smelled worst.

There were no ice cubes, because everything civilized in the house (even the powder room) had gone out of order. The barometer had gone up and down wildly. Perhaps that was why both Sheffield and Borden had so much trouble next day. The milk was very strong. Everyone said it tasted like goat's milk.

"What on earth was that you were shouting as you ran into the Slough?" asked Mr. Jenkins as they drank their last by candlelight. "You were yelling like crazy, something about *A dismal cry rose slowly, full of something melancholy, and something else despair.*"

Wyncote was too tired to be polite. "Was I? I didn't know. I guess it was Mrs. Browning's grand poem about poker."

"About poker? Surely not!"

"Probably I'm mixed up. Well, goodnight."

Labor Day came pure and cool. Mr. Jenkins forgot about the poem, but wrote to Phoebe telling her what a time they'd had fighting a flood at the Disposal Plant. In dryer air, books came unstuck; Wyncote pulled out Mrs. Browning and reread the poker poem — the one called *Dead Pan*.



YARNS

THE TIME THE MOTHS ATE GRANDPA'S UNDERWEAR

I wouldn't have written this except for my Uncle Rufus Polk. He's the one who lives over in Paw Paw County, which is up in the hills not far from where I live.

Uncle Rufe read the first issue of '47 and he got so excited when he came to John Steinbeck's little piece about *The Time the Wolves Ate the Vice-Principal* he had to quit and come over here to talk to me about it. Seems like a similar thing happened in Paw Paw County one time and he wanted me to write a story about it and send it in to you. The title he said should be *The Time The Moths Ate Up Grandpa Polk's Best Suit of Winter Underwear*.

Well, I told him I didn't think that would do but he made me promise I'd pass the word along one way or another. Hence this. I hesitate to put down on paper the more gruesome aspects of the occurrence, but the gist of it doesn't take too much telling.

According to Uncle Rufe—he was living with Grandpa Polk at the time—it happened on a cold, snowy night sometime during the winter of '43. The suit of underwear Grandpa Polk had was about worn out so he had just that day bought a new suit and hung it up in his bedroom closet alongside his bearskin coat.

Now it would appear that there was a pack, covey, or what-have-you of moths living in the attic and having a tough winter of it

in Grandpa's house. When the scent of fresh wool came wafting their way they suddenly became ravenous creatures intent upon the kill. With a ghastly fluttering of wings they swept down through the walls and pounced on the suit of underwear, only pausing en route to strip the fur off a lone mouse which was caught flat-footed on a two-by-four (this was verified later when they found the mouse's denuded body frozen stark and stiff only inches short of the sanctuary of the left-hand pocket of Grandpa's bearskin coat).

However, they didn't make the kill there in the closet—possibly being momentarily disconcerted by the menacing smell of the bearskin. The suit of underwear burst desperately out of the closet, through the house, and out the back door, one arm dangling almost severed. Up the hill behind the house it floundered, the



drooling pack close behind. They caught it at the top of the hill and ripped it to shreds and then ate the shreds.

Uncle Rufe and Grandpa didn't even wake up during all this either. It wasn't until the next day when they found the tracks in the snow that they found out what had happened.

In closing I'll say that these things do happen more often than you'd think. Panthers ate a fellow up right here in town years ago, too, but they ate *him* bones and all.

—Lorin P. Nunneley

DECISION

I went through two of the wards, talking to the men, and then I had an appointment to interview the Major while he was attached to the Base Hospital near Hereford. He was doing a heart operation that afternoon and had said I might attend.

The boy was already under anesthesia when I came into the Nissen hut that was used for surgery. A klieg light glared over the operating table and near-by were trays of surgical instruments. An orderly stood at the base of the table. The anesthetist was carefully watching the boy's breathing. A wide area of the boy's breast was exposed, swabbed a bright pink; the rest of his body was wrapped in white.

I winced at the first incision. The Major's assistant immediately clamped the blood vessels. Gradually, however, by immense concentration on the fine work, and the firm, unhesitating hands, I could almost forget that this was a boy named Frank, undergoing an operation that might mean his life.

The incision was swift and sure. The Major cut through each layer carefully until the ribs were clear. He delicately set a metal

vice between them and turned the screw on top, separating the ribs to expose the organ underneath. The outer sheath of the heart could now be seen, pumping evenly, plum-colored, darker than the surrounding tissue. Approximately half an hour had gone by. The doctor stepped up to three X-rays hanging from a wire overhead to gauge where the shrapnel lay.

"We'll have to open the pericardium," he said, returning. "The wall covering the heart," he explained to me.

To cut into static flesh was one thing; to cut into a moving organ was something else. For two or three minutes he tried to cut into the heavy, rhythmically pulsing sac. Finally he held it up by a blunt scissors and punctured it. The wall tore open, and he was through to the heart, a brighter red and smooth looking. I turned my eyes once when he probed with his index finger about the walls of the pericardium.

He glanced at his assistant, then at the X-rays.

"It's small," he said.

He put his finger into the sac, at one moment he held the beating heart almost in the palm of his hand. "We must find it," he said to his assistant.

His assistant probed, then shook his head.

"A larger incision," the doctor said. He cut down along the side of the body. He turned the screw of the vice, further separating the ribs. The anesthetist wiped the beads of sweat from the boy's forehead.

"How's he taking it?"

"All right," said the anesthetist.

Again he probed, bending over the body to reach up and beyond the ventricles. He rested for a

second, then said, "I must find the goddam thing." He leaned forward, his eyes closed, all his senses shut off except that of his searching fingers. Then slowly he withdrew his hand. "I think I've found it," he said. His assistant gently tried.

"It's in the right ventricle," the doctor said.

After a few moments, the assistant nodded.

"It's pretty well embedded and covered smoothly," the doctor went on. He was breathing faster now and his forehead was wet. He looked up. "I told this boy that if it weren't in the heart itself, we would take it out. If it were, and dangerous, we wouldn't."

No one else spoke.

"If I open the ventricle, he may die, here on the table," he said. "If I don't, and leave it in, it may never trouble him. And then of course it might. You can't tell. What do you think?" He turned to his assistant. The latter, in what seemed like a callous gesture, shrugged his shoulders. The doctor turned to the anesthetist. "What do you think, Sam?"

"Cut into the ventricle," Sam said evenly.

The Major turned to another figure who must have come into the hut without my noticing it. "This is a question for you to settle, chaplain," he said. He explained his promise to the boy. The chaplain was confused. "Well," he said, "perhaps . . . perhaps you shouldn't." And he looked at each of us. For a full minute there was indecision in the doctor's eyes, a struggle between his surgical skill, his doctor's inclination, and his promise to the boy.

Finally, with considerable reluc-

tance he said, "We'll sew him up."

I was relieved, Sam stood still saying nothing.

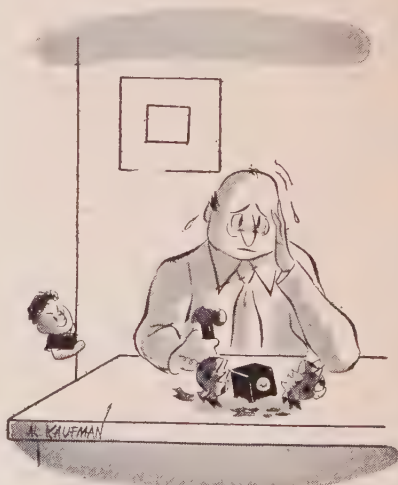
The pericardium was sewn, the vice withdrawn, the ribs knit, the skin sutured. I followed the Major into the rest room and offered him a cigarette.

"Thanks," he said. Then without waiting for my light, he walked away.

Later that evening, he stood alone at the bar in the officer's club. I went up to him. "I was hoping you wouldn't . . . well, cut into the ventricle," I said. "I was actually praying you wouldn't."

"Thanks," he said. "It's certainly funny. I would have never forgiven myself if something had happened to that boy." Then the tension in him seemed to relax a little, and he looked tired. "Perhaps I never shall, if something does," he said.

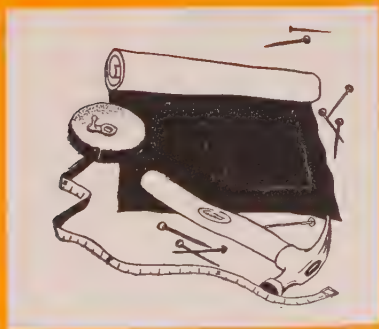
—*Michael De Capite*



'47 Reports . . .

Living Space for Americans

Houses cost more money than people
can pay — what's to be done?



by JAMES R. MILLER



LIVING SPACE FOR AMERICANS

You don't need to be told we have a housing shortage. Well, here's the whole story: the facts, the figures, the photographs; the arguments, the opportunities, the tasks. Duck the problem and we're on our way to a first class coast-to-coast slum.

NO MATTER where you live in this country, you can start traveling in any direction and within an hour come upon some other citizen who is living like a dog. It doesn't take much to realize that we have a housing problem. But it's not easy to measure it unless you know where Americans are living today, what their homes are like, how many of them need new ones, and what their chances are of getting them.

Our total population is about 141,000,000 and we occupy 37,600,000 dwelling units. A dwelling unit may be a 40-room mansion or a one-room hut covered with tar paper. We begin to get a focus on the housing problem when we see what people pay for these dwellings. On the rented dwellings, the median monthly payment is \$27.88 (for urban dwellings, \$30.25). That means that more than three quarters of them

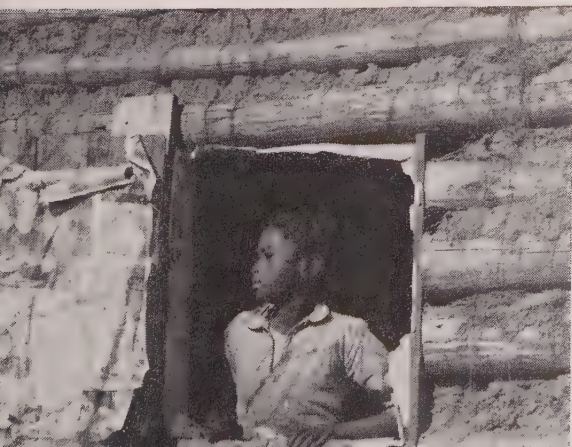


Rural New England's houses are often connected, barn-to-woodshed-to-kitchen. The centuries have added grace and comfort to Old World designs, and ready money has paid for the modernization. Only one other rural section, the Western farmlands, boasts so many well-kept buildings.

y James R. Miller

Photographs by
Arthur Rothstein

Millions of Americans, and their children, live in houses no better than the evil-smelling slums of Europe in the last century—except for public sewage disposal systems. The better-housed Americans help pay the costs.



A house is shelter, warmth, cleanliness, convenience, safety, opportunity to live, to raise healthy children, to build a healthy, useful family. A house is part of an American community. Does this girl live in a house?

are paying less than \$40 a month. Only 9.8 per cent are paying more than \$50. As for the owner-occupied dwellings—they are worth on the average about \$3,000.

But today there is almost no rental housing being built for payments of less than \$60 a month. There are very few houses being built for sale at less than \$6,000. There are a great many crowding the \$10,000 ceiling which the government maintained until the first of the year—like the six-room Long Island dream house recently advertised for \$9,990.

So much for the figures on homes we have. Our problem is more immediately that of the homes we need. Conservatively, we need 3,000,000, and we need them in a hurry.

How the Shortage Grew

THIS shortage has a number of causes, some recent and some of

such long standing as to embarrass all of us. After World War I, we had a big boom in babies, and through the '20's and '30's our population increased by 25,000,000. We built 7,000,000 new dwellings during the '20's, but dropped to 2,700,000 in the next decade. By 1940 it was clear that we were in trouble. In that year and the next, we made 1,300,000 new home starts, but when we entered the war housing slumped again.

Meanwhile, we had a boom in marriages. With this, plus the demobilization which at one point reached a million men a month, the walls of the American home really began to bulge. Some observers have wondered why this situation was not relieved by a return of war workers to the rural areas from which so many of them came. It is idle wondering. Most of these workers still have city jobs that are better than any they had in the country.

If this house represents the American dream, so did a slave's hovel of Rome, a peasant's cot in Medieval Europe, or the depression's city shanties. What price technology here?



any of them simply prefer living in the city.

But our shortage is not caused entirely by babies, marriages, or the volcanics of a war economy. It is caused also by the fact that many of our homes have outlived their usefulness. Coincidentally, our relatively high standard of living has been publicized so much that those of us in substandard living quarters are growing dissatisfied with them.

Let's examine some of these homes. Again we'll start with the total of 37,600,000 occupied dwelling units. The latest report (Bureau of the Census, 1945) is as follows:

Without private bath and private flush toilet—13,100,000 or 35%.

Without running water—8,100,000 or 21.4%.

Without central heating—19,000,000 or 52%.

Number in need of major repairs—4,342,000 or 11.5%.

These facts indicate clearly enough whether we have a housing problem; but like most hard facts, of which the atom bomb is the best example, their impact is at first more paralyzing than stimulating.

Even today we might be ignoring them if it were not for the concern generated by the plight of ill-housed veterans.

They have dramatized the shortage because it has hurt them more than any other definable group and because, as a group, they weigh heavily on the American conscience. The shortage hit many of them at a time when they could least afford it, financially and emotionally. It also happened that they were an uncommonly "hurttable" lot. They



CARL MYDANS

The scenery is beautiful. The house, on a submarginal farm, is less than a good barn.

came home in high spirits, full of hopes and dreams. They knew better than to expect any glory. But it never occurred to them that they would have to scramble, pay through the nose, or wait indefinitely for a place to live.

Discovering the truth, they have not hesitated to say what they think of it. There is a lot of appeal and a lot of sense in statements like the one recently made by young John Kennedy, a member of the Veterans of Foreign Wars, at a meeting of the National Committee on Housing.

"Can the veteran wait?" he



If Senators had telescopes, they could study slum buildings without leaving their Capitol's white dome. But Senators don't.

said. "I suppose he can. Any man who walked up the boot of Italy from Sicily to the Po Valley—who waited endless months in the prison camps—who stormed the beaches of Tarawa—certainly he and his comrades can wait. But should he have to wait? He definitely should not!"

He does, though. He and his comrades, by the thousands, are doubling up with in-laws and enjoying it about as much as you would expect.

Thousands more have taken to garages, houseboats, tents, Quonset huts, trailers, attics, and basements. Some are living in the

uselages of unfinished bombers. Some are back in the barracks. They prayed to God they'd never see again. An ex-Navy officer in North Carolina got a room for himself and his wife by watching the obituaries and calling promptly on new widows. In Chicago, hard-up veterans have already followed the lead of some of their British allies by squatting in vacant dwellings.

If we are going to provide homes for ill-housed Americans, including the veterans, we must first answer the very practical question of what they can afford to buy or rent.

A War Department survey of home-seeking veterans showed that of those who wanted to buy:

32% could pay \$30 a month.

54% could pay between \$30 and \$50.

14% could pay more than \$50.

Of those who wanted to rent:

34% could pay \$30 a month.

55% could pay between \$30 and \$50.

11% could pay more than \$50.

When we face the fact that half of our non-farm families earn less than \$2,500 a year, or \$200 a month, we can see that the real need is for homes that can be purchased for \$5,000 or less and rented for \$50 a month or less.

The Great Divide

WE ARE now looking across the great gap between ability to pay and costs. In our time, in our economy, we cannot even hope that the gap will be closed by raising purchasing power. Therefore, if we want to bring housing within the reach of those who need it most, we must try to cut building costs.

Some housing people think it

will never be possible to sell a good four or five-room house for less than \$5,000. It is certainly true that today a conscientious builder, even if he were building for love instead of profit, would find it difficult. But this is not quite as discouraging as it sounds, for it assumes conventional methods of financing, land acquisition, construction, and taxation. If we can find a way to lower all four of those major costs, we're on our way to an answer.

Money

ANYONE who borrows money to build or buy a home has to pay for that money. How much he pays depends upon the interest rate at which he makes the loan and the time he takes (amortization period) in paying it back.

These two items are very important to the home buyer. If he can get a loan at four per cent instead of five, that alone reduces his monthly payment on house and land by 5.4 per cent. If he is allowed to amortize over 31½ years instead of 26 years, that reduces his monthly payment by 4.5 per cent. In all, nearly a ten per cent reduction, and no hocus-pocus about it.

Already the government has stepped into home financing, and not a minute too soon. Up until 1933, the foreclosed mortgage ranked as high among American nightmares as flood and drought. But in that year, with the establishment of the Home Owners Loan Corporation, the government bought up thousands of lapsing mortgages, advanced money for home repairs, and moved into a home-financing position that it had been jockeying nervously for ever since World

War I. The Federal Housing Administration was created in 1934 and the short-term mortgage which had broken the backs of innumerable buyers (and banks, as well) was driven from the home market. FHA does not lend federal funds, but has promoted the long-term mortgage by *insuring* loans made by private lending institutions for construction, modernization, and repair. These mortgages can run for 20 to 25 years, carrying maximum interest rates of only 4.5 per cent.

Government loan insurance has taken a lot of the heat out of home financing, but it has not yet done much to inspire the building of homes for the low-income people who need them most. It is one thing to make interest rates safe and sound (for the lending institutions) and another to lower the rates to a point where they would make a real difference in monthly carrying charges.

THE question is, can it be done? Many people who would like to see it done feel quite honestly that financial institutions themselves cannot be expected to do it. They say 4.5 per cent is a fair charge. Others think they could possibly afford to lop off one per cent more. It would help. The argument for their doing it is that they are semi-public institutions and should take their public obligations just as seriously as they do their other obligations.

There are alternatives. The government could subsidize lending institutions or it could make loans direct to builders at rates as low,

perhaps, as 2.5 per cent. Both activities would entail government restriction and supervision, and the latter would cause a great howl about government competition. The howlers, however, might be reminded that even now the government is in a position to build housing all by itself if the public demands it. The question, as usual, reduces itself to that of how much we really want low-cost housing. If we get it, it's sure to cost something in the way of profits or government participation.

There still remains the possibility of easing money costs by lengthening amortization periods. This, of course, is simply a way of lightening the buyer's monthly or yearly burden. His total load will be greater because he will be paying interest for a longer time. To be sure, the long-pay-off can look silly, but up to a point it has made home buying far easier than it was in the days when a man could get only short-term loans and had to renew or face foreclosure.

Probably the best way in which amortization periods could be extended further would be through long-term loans to building corporations which would manage and maintain large projects or, if they were building to sell, would set up maintenance agreements. Here, the lending agency would be dealing with an investment builder, not a speculator, and its main worries about long amortization — depreciation and obsolescence — would be dispelled by the maintenance



provisions. On the other side, it would make money costs easier for the builder and he would be able to pass this on to occupants in the form of lower rentals or carrying charges.

Not the least of its virtues is the fact that a building project with such maintenance provisions would benefit its community as a whole.

Land

THE cost of a home depends importantly upon the cost of the land beneath it and around it. The lot for a small single-family house generally costs from one tenth to one eighth as much as the construction of the house itself. Only 55 per cent of this goes for raw land. The rest is for development.

Many a would-be rustic has bought himself a beautiful country parcel with a brook, birds, and trees, only to find that before he could build the land would have to be levelled or filled; water, sewer, and gas pipes would have to be laid; telephone and electricity would have to be brought from the main highway; and that if his ruddy little road were ever improved he'd be clipped for that, too.

Most people don't pay for land that way. Whether they are home owners or renters, their land costs are included in the same monthly bill that covers the stove or the washing machine. In order to prove that land costs are too high we have only to show what holds them up.

In the first place, it is a devil of a job to assemble land that is suitable for large-scale—that is,

Spot Drawings by Neuwirth

economical—home building. If a builder wants to develop a large stretch of suburban property he immediately finds himself involved in a long and expensive series of negotiations. He may have to find scores of owners and persuade

them to sell at fair prices. Some of the lots will be in arrears on taxes and assessments, and that involves paying up and clearing the titles. Some of the land will be subject to zoning laws and restrictions that may necessitate court action. Maybe you think he could avoid a lot of this trouble by developing more outlying land. He could, but the farther out he goes the farther he gets from such community services as police and fire departments, schools, transportation, and hospitals.

Suppose he wants to build low-cost housing inside a city. Land all occupied? Not by a long shot. Most cities have hundreds of vacant lots and abandoned buildings. But what happens if the builder tries to buy some of this land? Again he has the problem of dealing with many owners. It's even harder than in the suburbs. For this land, however blighted, is extremely expensive. But let's assume the owners are willing to sell. In 1943 the Real Estate Board of Baltimore found that the average price per square foot in a run-down section was \$2.19. Builders estimated that if they were to use such property for houses to sell from \$4,000 to \$6,000, the land price would have to come down to 30 cents per square foot. Prices for comparable land in other large cities are

just as high and often higher.

It might seem that suburban land costs could be lowered, home for home, by increasing the number of dwellings per acre. For example, by building row houses. But it doesn't work that way. Row houses almost always drive land costs upwards. Apparently the only way to cut land costs for the suburban buyer or renter is by making better use of the land available—by economizing on its development.

There's room for saving here. Most large suburban developments have been conspicuous for a symmetry of plan which is



neither attractive nor efficient. Large acreages have been systematically levelled, then cut lengthwise and crosswise so that all lots are the same. It was probably supposed that this was economical, but subdividers with imagination lately have proved otherwise.

They have shown that more often than not they can save natural beauty *and* money by preserving the original contours of the land instead of levelling it. They have shown that curved streets and wisely situated circles are not only pleasanter than straight lines but even better adapted to the efficient use of water, gas, power, and sewerage services. They have shown that by cutting lots for less depth and greater width, they can build homes with more light and air and with garages alongside in-

stead of behind, thus saving money on driveway length.

Reducing land costs within a city is another kind of problem. For the cost of city land is usually an inflated cost created and sustained by the high taxes levied against it. The price of city property often has no relation to its value in terms of current income, as is the case in slum areas. Unluckily, it costs the city just as much to service a block of tenements as it does to service a block of sparkling, expensive apartments.

So far, this tax-cost circle has been broken, or jumped, in only two ways. The Metropolitan Life Insurance Company, for example, has such gigantic capital resources that it has been able to take advantage of legislation that regulates prices and relaxes taxes on New York City land condemned for slum clearance. And in order to buy land for slum clearance between 1937 and 1941, local housing authorities (under USHA) went ahead and paid such prices as \$5.26 per square foot in New York, \$2.49 in San Francisco, and \$1.57 in Boston. Naturally, these costs were not passed on to the eventual tenants.

In both city and suburbs, low-cost home building will require large land parcels, for it is only on large-scale projects that the builder can save by planning and mass producing.

Construction

THEORETICALLY, it's possible to make a real dent in construction costs, and since they represent about 75 per cent of the sales price, this looks like the way to bring it down. Practically, it is

hard to cut construction costs because of the way the building industry is organized—or disorganized. A breakdown of construction costs makes this clear. Materials and labor are the most conspicuous items. Both can be trimmed. But the cost of materials is the one to keep our eyes on because it will amount to 45 per cent of our total cost and more than half of it is accounted for by distribution.

Won't we always have the problem of getting materials from factory to site? Yes, but they shouldn't have to take the longest way around, as they do now, stopping en route to see the jobber, the wholesaler, and the retailer, and paying a toll for each visit. That's the way the building industry is set up. Thousands of middlemen taking their bites one after another. Collectively they bite off one third of the cost of construction.

Let's remember that while we look at the other cost items.

Houses are made mostly of wood, stone, and metal. To cut costs on materials proper we will have to make better use of the conventional ones or greater use of new ones, or both. Meanwhile, we are going to want better houses as well as cheaper ones. That will slow us down a bit, but it need not stop us. There are cost-cutting possibilities, for example, in plastics, glass, and sheet metal.

Plastics have had such a build-up in recent years that many people mistake them for the universal substitute. They make excellent telephones, combs, toys, and even contact lenses. But they are not being used for anything of great structural importance be-

cause, instead of costing less than steel or wood, they generally cost more. Another drawback is that rats and mice like to eat them.

Some of them look promising, however. Pure Portland cement (minus magnesium, alkalies, and free lime) reinforced with laboratory glass or with bamboo, has been made into cement lumber that can be sawed and nailed and is both fireproof and vermin proof. "Pressed earth," a concoction of earth, water, oils, or asphalt, can be poured into forms like concrete and has been used successfully for walls as well as foundations.

Glass is another material that can be more fully exploited. It has already made a good impression in some of our bigger modern buildings. It has proved itself a match for great structural stresses and strains and surprisingly suitable for the pipes and fittings of a plumbing system.

Glass building blocks provide light, privacy, and good insulation. Nor have we gone very far in the use of light gauge steel or aluminum for walls. As an emergency measure, England built hundreds of temporary steel cottages. Here again, we can't know that this use of metal would cut costs until we try it on a big scale.



The most spectacular use of new materials in this country is in Buckminster Fuller's Dymaxion house, the circular suspension job that is made of plastics and aluminum. A year ago, Fuller

thought he could turn these out for \$6,500 apiece and that with real quantity production (500,000 a year) he could cut to \$3,700. At that price they might very well sell like hot cakes.

The Prefab Picture

PREFABRICATION may be another way to cut construction costs. There are three kinds of prefabricators today, two of which are very important in the cost picture. The first of these is the factory or "pure" prefabricator. He has had the most colorful publicity because he makes the whole shell of a house and ships it from factory to site, where it is sometimes reassembled at breath-taking speed. But since the cost at the site is the only thing that interests a buyer, a prefabricated house of this kind will interest him greatly only if the shipping charges are low and the site is already prepared for such services as water, gas, and electricity. These "if's" are so big that some prefabricators claim very little in the way of final construction savings.

"Site" prefabrication is a method of getting around some of the "if's." What it amounts to is an assembly line technique in cutting and shaping the main wall, floor, and roofing units of a house. It is an entirely sensible kind of construction for anyone who builds on a large scale.

Unfortunately, no one is putting in orders like that today. Even so, we can see how site prefabrication works by looking at some of the big "operative builders." They are the men who buy raw land, subdivide and improve it, build houses on it, and then sell

houses and land together, usually several hundred at a time.

It was with this kind of operation that David Bohannon of California, one of the most successful of these builders, put up 1492 stucco bungalows on his San Lorenzo subdivision near Oakland,



California. He ran up the first 633 at the intense rate of one every 45 minutes.

While there is a lot to be said for building houses this way, we can't expect many builders to do it. The main reason is that it takes an enormous amount of capital. And although Bohannon probably saved 30 per cent on labor and materials, a good portion of this was gnawed away by his overhead. He sums it up this way: "Although the large operator is usually compelled to work on a small profit margin per unit, his volume can make his annual profit satisfactory. Thus the consumer can expect a greater dollar value from the large operator."

Greater dollar value, to be sure. But Bohannon's San Lorenzo houses sold for \$6,000 apiece. There was a market for them, all right, but it wasn't the great low-income market.

The third type of prefabricator is the one who makes one-piece kitchen or bathroom units. He can offer a lot in the way of functional design but, like the other factory prefabricators, he needs a nearby market to avoid heavy shipping costs. And in order for his product to save much at the

ying end homes must be built "take" these units without extensive tailoring of the spaces they are made for.

In an industry as badly organized as housing, the prefabricator has to have a lot of guts. He can't begin to produce without making a huge investment, and he is not likely to do that without being reasonably sure of a market.

Wilson Wyatt saw this and it was his fight to give prefabricators financial aid, market assurance, and a large share of scarce materials that precipitated his showdown with the Administration. He may have overrated prefabricators, but it might also be argued that the boss of an emergency program has to take some chances. At any rate, without such help prefabricators can't contribute much to low-cost housing in the near future. During the war they built 200,000 houses. In the past year they may have built 10,000. In 1946, of course, they were short of materials, but even now, with materials easing up, they show no signs of hitting the low-income market.

American Houses, Inc., which has been in the business for 15 years and is one of the largest, is selling its houses in the \$5,000 to \$10,000 range, with most of them near the top of the scale.



oster Gunnison, another big prefabricator, is selling in the same range. These builders are putting up houses as good as any for that money. They are structurally sound and not, as some people

think, all of a kind. But at their prices the prefabricators are not going to help the Americans who need them most.

Labor

"CARPENTERS may install individual shingles, but roll and strip shingle roofing is the work of roofers. . . . The finishing of window sills and chimney caps is the work of cement finishers; yet, this is a simple job that could easily be done by the bricklayers or by any common laborers."

This is typical of the complaints, heard most frequently in the higher echelons of the building industry, against current labor practices. Such practices are common and they do add to the cost of construction. We're trying to cut that cost. But anyone who thinks we can do it by blasting labor is mistaken. There is too much to be said on the other side.

Fortune magazine, which is not exactly the workingman's bible, has said some of it. After studying restrictive labor practices in and around Chicago, where the building trade unions are strongest, it declared that "no more than three per cent of the cost of a conventional house could be directly charged to make-work rules."

Three per cent, of course, is three per cent. Why should there be any featherbedding at all? The immediate reason for it is, that home building has always been a seasonal job. When building unions spread work and balk at labor-saving devices and demand high hourly wages, it is because they are thinking of their yearly take-home pay. They remember,

as others forget, that they are apt to work only 150 or 175 days even in a normal year.

This is not an attempt to justify practices that are economically wasteful, but it is an attempt to direct criticism to the proper target. Unions are watching out for their own in an industry that forces them to do so. The way to get rid of labor abuses is to root out their causes. These, like the causes of so many other housing troubles, are to be found in the fantastically disorganized machinery of the building industry as a whole. When the leaders of the industry and the government can work out a building program with month-by-month and year-by-year continuity, then labor will have no excuse for featherbedding.

The burden of industry reform will rest most heavily upon management. By its nature, it is in the best position for effecting changes. There is no reason, however, why labor should not be privy to the reform councils. It has a great stake in the housing speed-up and should be able to contribute some good down-to-earth ideas on building technology. Already, there is a good deal of talk about an annual wage for construction workers. But it won't come to pass until the industry is organized along something like stream lines.

Having groused so much about the industry's over-all confusion, it behooves us to provide some illustrations.

Deadwood and Confusion

CONSIDER the fact that the average conventional house combines 30,000 to 40,000 different parts of

various sizes and shapes and that these are supplied by 88 different industries.

David Bohannon tells us what this means if you are a builder: "Due to a lack of co-ordination and planning, materials and men have been forced to meet the whimsies of a thousand architects. They have been obliged to keep in stock 1200 to 1500 patterns of lock hardware, 19,238 sizes of valves and pipe fittings, 139 sizes and kinds of paint brushes, 179 varieties of iron and steel roofing. . . . And these figures are all reductions from previous practice, for the Bureau of Standards has persuaded the industry to get along with 72 types of lavatory and sink traps in place of 1114, and 1156 kinds of cut tacks and small cut nails instead of 21,200. Middlemen, for the same reason, have become 'inert warehousemen masquerading as merchants.'"

Certainly it is up to the leaders of the industry to clear up this mess and to get rid of the deadwood, and Bohannon does housing a real service by calling attention to it. But if he and other builders are to do anything more about it, one of their first objectives will have to be the outmoded building codes.

In principle, they make sense. Their purpose is to protect people against the hazards of fire, weather, and disease. The trouble is that there are too many of them and most of them were written to regulate the use of old-fashioned building methods and materials. They are hard to change because nobody wants to do the dirty work (Chicago codes, for example, cover 600 pages of fine print), and because

many of them provide a market for influential manufacturers.

The main fault of the codes is that their safety standards are often based upon the type of material rather than on the performance of any particular material. For this reason a number of new materials which meet the toughest requirements as to strength, durability, fireproofing, vermin-proofing, and even cost, don't have a fair chance.

Also, the codes of many cities are so complex and confusing that architects and builders have no choice but to play doubly safe on their plans and then add to their contingency allowance on the final home price. That's where the occupant catches it.

Any community can bring its codes up to date by consulting the easily available studies made by building officials and underwriters, the National Bureau of Standards, the American Society for Testing Materials, and the American Standards Association. This is one way to lower the construction costs that figure so importantly in any kind of home building. If we really want low-cost housing, we will do it.

And Taxes

TAXES are here to stay, and maybe to grow. They add a sizable sum to the monthly payments of both owners and renters. On a home assessed at \$6,000 with a three per cent tax rate, the owner pays \$180 a year. A renter in the same house would find a tax charge of \$15 in every monthly payment.

Property taxes provide a very great proportion of total government; until 1939 they returned

even more than income taxes. But our concern is that municipalities depend upon it for more than 90 per cent of their income. Since municipal services should be increased and improved more often than not, town and city fathers can't be expected to reduce this source of income without a battle, if at all.

We cannot underestimate the need for good services, but we can question the wisdom of putting so much of the tax load for them on real estate—if we suspect that this load adds too much to the cost of housing. But in order to lighten the load, we must find a better way to tax property and, in addition, a way to increase municipal income from other sources.

AT PRESENT, real estate taxes are based on imaginary values. Many slum properties are assessed at two or three times their market value. It's easy to say that such taxes are out of line, but it's hard to correct them. The usual approach is through some kind of tax exemption. Some communities have tried to stimulate home ownership by the "homestead tax exemption," which lifts the tax from all or part of the assessed value of a man's legal and declared residence. It also undermines the tax base of the community. Some building corporations have been granted tax exemptions with the proviso that they limit their dividends and observe certain rent ceilings on their projects.

Nine states have tried tax limitation laws under which there is a maximum property tax rate that cannot be exceeded by any combination of levies. (A piece of

property in Florida was once levied against by 13 separate taxing units.) But these laws have usually back-fired into the heart of municipal services.

In West Virginia the result was reported as follows: "Morgantown vacated all offices and positions and ordered the discontinuance of street lighting and fire protection. Wheeling was forced to discharge all employees including the mayor and council. . . . In some cities prisoners were released from city jails because there was no money with which to buy food for them."

Some of these schemes were bound to fail. Others have not been tried widely enough or long enough to prove themselves. But the impression they all give is that we can't put arbitrary limits on property taxes unless our municipal governments have other resources at hand. They seldom have any for the simple reason that all other tax plums have been gobbled up by the state and federal governments.

It is time, therefore, to ask whether or not the municipalities should be allowed to shift some of their responsibilities onto the state and federal governments. Or maybe the latter should share more freely the rich income sources they have pre-empted. Either course would give the municipalities great relief, but, oddly enough, they might spurn it. Municipalities in relation to state, like states in relation to the nation, are very jealous of what they describe as their sovereign rights. They often fear that these rights may be threatened by the supervision from above which usually accompanies grants-in-aid from above.

Despite the objections, necessity has forced attempts at such co-operation. California, Colorado, Minnesota, and Wisconsin have experimented with a state tax shared locally. It has reduced property taxes on the local level without weakening local governments. It is worth noting, too, that all 48 states survived PWA, WPA, and CCC aid from Washington with their sovereignty remaining intact.

It has not been possible to say just how much each of the four major housing costs should be reduced, but as Dorothy Rosenman, Chairman of the National Committee on Housing, makes clear in her excellent study, *A Million Homes a Year*, reducing each cost a little would bring the total figure within the reach of additional millions.

How Can the Job Be Done?

Now that we have suggested several ways to cut costs we must admit that what we have is a challenge, not a program. Ultimately, it is a challenge to America's system of free enterprise. It is fair to expect any self-respecting system to provide its people with the essentials of decent living. If housing is to be provided, it looks as though it will have to be done in one of three ways: (1) by private enterprise alone; (2) by the government, in which case private enterprise throws in the towel; or (3) by private enterprise and Government working together.

How much can we expect private enterprise to do by itself? We'll have to judge by the record. In 1925, the best year the building industry ever had, it made

100,000 starts on nonfarm homes. After that, production dropped off and hit a low of 100,000 in 1933. It rose again slowly to 100,000 in 1941.

What we need today is a steady annual production, for at least 25 years, in the volume that the industry has achieved only in the best of times.

THERE are still those who say that the simple answer is to remove all kinds of control and direction. Then the building industry, responsive to the law of supply and demand, will produce the homes we need. They cannot but admit that the industry's first move would be to build for the high-cost market. This is justified, with a certain interior logic, by saying that as well-heeled people move into expensive homes, they will create vacancies for those who can afford less. Now we hear another argument that is plausible, if not noble. Since prices are inflated today, why not build first for those with money. Isn't it fairer for them to bear the burden of inflation than it is to pass it down the line?

These arguments are persuasive and we may have got ourselves into such an economic mess that they will have to be heeded. But it is impossible to accept them without the sensation of having been trapped. They rationalize our providing first for Americans who need least, but whose ability to pay is a guarantee of profits. They reflect a slavish, cynical attitude toward conditions which, after all, are man-made. And they are loaded. One can't help thinking that people who really need homes may someday tire of situations in which

their forbearance is someone else's gain.

If we keep our eye on the fact that the real need is for low-cost homes, by the millions, we must admit that the building industry is not geared for the job at present. This is not to say it never tries. Perhaps its inadequacy can be illustrated by describing one of its most successful efforts and showing how far from typical it has been. This is the housing program of the Metropolitan Life Insurance Company.



The Metropolitan Experiment

WE START with the fact that its company has capital assets greater than those of any other private corporation on earth—\$7,500,000,000. Add the fact that in 1938 New York State passed legislation permitting insurance companies to invest up to ten per cent of their assets in moderate rental housing.

This was a chance for Metropolitan to go to town, and it went. In three years, at a cost of \$50,000,000, it built in New York City's Bronx a community called Parkchester. It is the world's largest single housing project. It has 51 buildings, which house 35,000 people in 12,272 two to five room apartments. The average monthly rental is \$15 per room.

In 1943, New York State bid for more private investment housing with a law permitting munic-

ipalities to condemn substandard property, buy it "at fair prices," and sell it to redevelopment companies at cost. The law also provided certain tax exemptions. Metropolitan wasted no time in taking advantage of this and is now building what it calls "Stuyvesant Town" to replace 18 blocks of slums on Manhattan's lower East Side. Here it will house another 24,000 people in 8761 apartments for a monthly rental of \$14 per room. One major flaw: The population density will be 600 per acre, and most housing students consider 200 the safe maximum. Also, the project does little to help the slum dwellers it replaces. They can't afford to live in it.

Metropolitan's housing investments in New York, Washington, San Francisco, and Los Angeles now total \$200,000,000. Their projects are self-contained communities with commercial and recreational facilities for every occupant. Construction costs were



pared by buying materials in huge quantities and by such devices as standardizing all bathrooms and kitchens. The final result: moderate rental for tenants and a four per cent net profit for Metropolitan on its invested capital. It has very few investments which yield more or even as much.

It is possible to be enthusiastic about this achievement. But it

can hardly be mistaken for a private enterprise answer to the housing shortage. Obviously, most builders don't have the resources to operate in this fashion. A few other insurance companies are beginning to follow suit, but if the dozen largest made housing investments proportionate to Metropolitan's, they would increase America's total dwelling units by only about 200,000. Given time, these companies and some large building syndicates might do a very impressive job. But those who are short of homes are also short of time. They need homes costing even less than Metropolitan's. We must continue to look for another kind of economic solution to housing.

Public Housing

THERE is a great deal to be said about public housing, but if we think of it as a way to provide great quantities of low-cost homes in the near future, it becomes almost an academic matter. I say this because the government will never build on a really large scale except in an economy that virtually abandons free enterprise. That would be a socialist economy, and the prospects for socialism in the United States in our time are very dim.

Even so, we can take a look at public housing, such as it is, in this country and as it is in Britain, a country with socialist ambitions. It will at least show how much further our government would have to go before our building industry could be seriously alarmed about competition.

The United States government first built homes with public funds during World War I and

not again until 1933 when the Housing Division of PWA made low-interest loans and extended tax privileges to limited dividend building corporations. There were only a few such projects and they failed to serve the low-income levels. The government made its first real stab at housing in 1934, when it built and operated 51 low-rent projects in 36 cities. These did serve the low-income levels. Operating and maintenance costs were met partly by rental money and partly by government subsidy. Then, in 1937, the United States Housing Authority was authorized to make loans to local public housing agencies for the construction of low-rental projects. In order to assure low rents, the government made further contributions in the form of subsidies and tax exemptions.

Actually our government's ambitions in public housing are quite modest. They do not begin to compare with those of the British government. In that country the home shortage is acute, just as it is here. The Luftwaffe and V-bombs destroyed or damaged beyond repair about 400,000 homes. The crowding caused by this and the total stoppage of residential building during the war has inspired Britain to aim for 1,300,000 new dwellings within the next four years.

Even before the Labor Party was voted into power the government determined that new homes would go first to the low-income groups. It also assumed that national subsidies would be necessary to provide for this market.

Those two ideas underlie British housing policy today, and the program has taken on mighty proportions. Even a year ago local

housing authorities in England and Wales had acquired 60,000 acres for home sites. The cost ceiling on new houses, with strict quality control, is \$4,800. Private



speculative building is not tolerated. Building costs are highly inflated, as they are here, but there is no question of where this burden will fall. The government is absorbing it, which is another way of saying that everyone shares it.

The cost of such a program will be great, but that is not slowing the Britons down. Their starting point is the great fact of a great need. Housing observers visiting England from this country reported back that "the feeling among all levels of government officials and among many of the leaders in the building industry was unanimous . . . an absolute determination on all sides and among all groups to do this huge job of housing and planning without reference to the magnitude of the financial problems involved." When Aneurin Bevan, Minister of Health, was asked about the costs, he smiled and said, "You in America have demonstrated how well a nation can live on an unbalanced budget."

Britons, even with labor in the saddle, are not likely to lose their talent for getting the most out of

a pound. But their housing program will not be copied in America. One has only to imagine with what warmth Mr. Bevan's statement would be welcomed in the higher councils of our industry.

Our Emergency Program

Now let us see whether there is any chance of solving the housing problem by honest co-operation between our government and our building industry. We can start with a brief review of our most recent effort in this direction. This was the Veterans' Emergency Housing Program. The fact that it came to a sorry end does not necessarily prove that government and industry cannot work together. It may only prove that they do not yet have the same ideas about housing needs and aims, or that neither has very good ideas.

Wilson Wyatt set his sights for 1,200,000 home starts in 1946 and 1,500,000 in 1947. His main interest was in providing homes for veterans—homes that would sell for not more than \$6,000 or rent for not more than \$50 a month.

His program was based largely on measures like these: the restriction of commercial and industrial construction; a priorities system to direct most materials into veteran housing; a system of subsidies (also some price and wage increases) to stimulate the production of building materials; a guaranteed market for prefabricators; liberal FHA financing terms for builders.

THIS program started a running battle whose issues were pretty well stated last September in a Town Meeting of the Air debate

between Wyatt and Peter Grimm, Chairman of the Board of the William A. White real estate company and president of the Chamber of Commerce of the state of New York.

Administrator Wyatt put it this way: "Which should come first—homes for veterans or commercial and industrial construction? We can't build both and get enough housing."

Mr. Grimm saw it differently: "Manufacturers who make materials for housing also make materials for commercial buildings. They depend upon the latter for their profit and for the maintenance of a balanced organization. If you cut out commercial construction, they don't, and won't, produce for either."

"Even with restrictions," said Wyatt, "65 per cent of all building completed in the first seven months of this year (1946) was non-residential, and the 30-year historic average is 69 per cent. So you can see that it took the restrictions in order for housing to go forward at all."

Wyatt's program must be judged on the basis of its two year projection and against the background of its legislative inadequacies. When he resigned, he could point to somewhere between



900,000 and 1,000,000 starts and almost half that many completions. These include some pre-Wyatt starts and a great many conversions and temporaries.

There has been much criticism

of the lag between starts and completions. The reasons for it were that materials flowed slowly and that labor has slowed down. (There is no reason to think this has been a tactical slow-down. The fact is that most building trades workers are middle-aged and elderly men. They worked hard during the war and are letting up like the rest of us.) As for rental housing, it must be considered a resounding flop.

WE'VE heard from the Administrator and his opponent. Now let's hear from some others.

Alexander Jarvis has been building houses in Manchester, Connecticut, for 30 years. I talked to him one day when he was out supervising his construction gangs on a 50-house development. Jarvis likes a fair profit, but he has enough of a heart to see costs from a buyer's point of view. He looked down the road and nodded toward a neat, white frame house. "See that one," he said. "That's just finished and a veteran moved into it yesterday. What do you think it's worth?"

I said that before the war I could have bought it for \$5,000, and that I thought it was worth about that.

Jarvis grinned at me. "Fair enough," he said. "I charged that boy \$8,500 for it. I'm probably going to have to charge more for some of these others, and so help me, I'm no chiseler. I'm putting up good houses—the best I can—because I've been around here a long time and I've got a reputation. I'm paying about twice what I ought to for every stick and stone I use. If you can figure out any way I can sell the houses cheaper, I'll listen to you."

Later, I saw Bill McCue, who had been in housing for seven years and was Wyatt's expediter in the Hartford area. He thought highly of Jarvis and said he was convinced no builder could do a more conscientious job. "My own job is to help these builders wherever I can. Sometimes I can wangle materials for them. I know some of the shortcuts on changing building codes and zoning laws, so I can help the local officials on that. But no matter what you do, you can't beat the cost problem under the present set-up. The black market is fierce, and the only answer I know, unless you want to give in completely, is to toughen up the laws and really enforce them."

The next day I went to see James Walker, the veteran who had just moved into Jarvis' house. He and his wife, Shirley, showed me around. They had a spacious living room with a wood-burning



fireplace, two bedrooms, a handsome kitchen, and bathroom. The second floor, unfinished, was large enough for two more rooms.

Mrs. Walker said, "My husband was in the infantry and was discharged last January. It was pretty hard after that. I don't know what we'd have done except for some friends who were good enough to give us an attic room. We were in it, with our daughter, for six months. Finally we heard about some building here in Manchester. All we saw of this house was the foundation, but we bought it on the spot."

They had put \$500 down and were paying \$53 a month.

George Rothstein, another veteran, recently bought a house on Long Island for \$10,000. "It's a good house," he says, "but I certainly wouldn't be paying that much for it if I didn't have to. It looks to me as if it's worth about \$6,000. Anyway, my wife's having a baby and we couldn't stay where we were. That was a one-room basement apartment. We were there a year. I'll be paying \$75 a month here. I rustled up \$2,000 for a down payment so I wouldn't have to pay on it forever. All I can say is I'm darn glad I could do it. I know plenty of guys who couldn't even think of it."

Where Do We Go From Here?

WE HAVE said that our real job is to make every possible cut in the four major costs of housing. Our discussion of these costs has shown how complicated they are.

We have said that the building industry by itself is so uncoordinated that it cannot be expected to achieve any important cost-cutting in the near future.

We have seen that the job cannot be done by public housing alone because in a free enterprise economy the government simply cannot get away with that kind of competition.

There is still room for hope. A great many good and energetic people are concerned about housing and have gone so far as to blueprint ways and means to cut costs and to get it. They have drawn their blueprint in terms of the industry-government co-operation. Their plan is embodied in the now dormant, but not dead, Wagner-Ellender-Taft Bill.

This is not a perfect housing bill. But it is basically sound. It is an outgrowth of hearings which began in June, 1944, before a Senate committee on post-war economic policy and planning.



The bill was written by legislators who understand that we have an absolute shortage of 3,000,000 homes, that we have from 5,000,000 to 10,000,000 homes which must be replaced, and that between one half and one third of our families cannot afford to pay what the building industry charges for the kind of homes they need.

The bill aims to provide homes for those who can pay from \$30 to \$50 a month either for carrying charges or rent.

It amends the National Housing Act so as to extend amortization to 32 years and to reduce the interest rate on 95 per cent loans to 4.5 per cent or less.

It further amends this act by raising the insurable loan for *rental* housing from 80 per cent to 95 per cent, by increasing the length of the loan from 30 to 40 years, and by reducing the interest rate from 4.5 per cent to 3.5 per cent.

The bill provides for easier methods of acquiring large land parcels through a combination of federal and local aid. This is for redevelopment mostly with privately financed housing. It also provides aid for privately financed housing in farm areas.

Recognizing that private enterprise cannot build for families in the lowest income brackets, the

ill calls for 500,000 units of locally administered public low-rent housing to be built over a period of four years.

The Wagner-Ellender-Taft Bill has been called a public housing bill, but it is not. It is, quite explicitly, a bill to stimulate private enterprise building. It aims at a sustained production of about 500,000 dwellings a year for ten years. Less than three per cent of this total would be public housing.

Can we afford it? Most of the bill entails loans on FHA insurance. The only real costs to the government are annual subsidies on public housing projects and charges for land assembly and redevelopment. The maximum cost per year, over a five year period, would be \$143,000,000, which is actually less than one per cent of the minimum annual Federal budget, not counting national defense.

There is no conceivable way in which this bill could compete with private enterprise. Its public housing provisions apply to a market that private enterprise cannot even pretend to serve.

The bill has had conspicuous bi-partisan support in Congress, almost unanimous support in the press and the approval of scores of church, labor, educational, veteran, and civic-minded housing organizations.

I AM making a special plea for the bill because I think it represents our first sincere attempt as a nation to see the housing problem in the perspective it demands, and because it is tragic for us to come so close to housing progress without getting it.

Although there is nothing in-

scrutable about the bill or the situation, there are those who will fail to understand it or who will refuse to. They might profitably listen to Mr. Walter Aiken, a builder in Atlanta, Georgia, who has reduced it to simple terms.

He said: "I've had little or no time to argue with public housers or other governmental housing people . . . As far as [they] are concerned, they have their job and I have mine. In fact, some of my best customers were 'graduates' from public housing projects. They had gotten used to clean, decent living quarters, and when their incomes made them ineligible for public housing, they moved into my market."

That is about as good a statement of sensible housing relations between our government and private industry as anyone has ever made. When the rest of us see it as clearly as Mr. Aiken does, that great gap between costs and ability to pay will begin to close, and our ill-housed one third will move into the homes they need.

OPINION poll after poll has shown that the American people consider the abominable conditions in which millions are living almost two years after V-J Day the

Number One domestic problem. One wonders whether they are aware that the most promising single measure yet proposed now lies dor-

mant in Congress, and that unless they raise their voices and make their will felt it will probably continue to slumber as peacefully as though they did not give a hoot how one third of their countrymen fared.



Communications

FORESIGHT

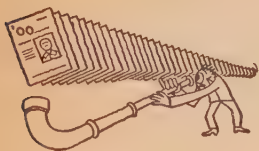
'47

Sirs:

Being a chronic worrier, I have been lying awake nights wondering what we are going to call our '47 publication the year after 1999. I don't think this problem calls for an emergency session of the board of directors, as I hope to have worked out a satisfactory solution by myself before the year 2000 rolls around, but I'd like your slant on this.

—Edward A. Harris

[Note: Mr. Harris' vexing question has plagued '47's founders. The notion of readers yet unborn asking for "Double-oh," "Zero-Zero" or "Naughty-Naught"



makes them shudder. And there is always the ghastly possibility of someone confusing numerals with letters and asking for a copy of "00 as in coo." Painfully aware of this poser, '47 welcomes readers' suggestions as to its solution. Don't delay. The urgency of the matter is suggested by the fact that our deadline is less than 54 years off.]

WITHOUT EMBARGO

Senores:

It makes many weeks I received from your hands the notices that the so recently born periodical, '47, will greet with much taste the articles calling themselves "shorts" from the proprietors-contributors, between the which it permits itself to count me. I feel it much that before this hour I do not contest your communications, because it makes two months I sallied forth from the States United to this country most beautiful.

For me there would be many satisfactions assisting to you in that affair, but it owes itself to explain that day for day arrives to be more difficult the writing by me the tongue English, the which doesn't speak itself very broadly between the Costa Rican population. But, without embargo, I will make the efforts with all powers.

There is to know, in the first time, that Costa Rica not of the Caribbean is, nor even an island neither. I have that to clarify for that many friends wrote with low concern to proffer felicitations because surviving we remain the earthshaking recently in Santo Domingo, the great billow of the beach on Cuba, and the tornado wounding the coast most northerly of the Indes West British.

By venture, it finds itself interesting for you that this so small but amiable landscape finds herself January in the season of

summer. Terminating the rain in December it is not arriving another time until March or April, not even the very little water called cat's fur.

To the citizen or citizenness from other landscapes, this of the Ticos gives many matters strange and unaccustomed, like the language very difficult, but to Americans (m) and Americans (f) I owe myself to clarify that exist here many things in the time running of much familiarity. Although water hot in the basin for hands and mattresses of springs of the beds are not here finding themselves in abundance, the tourists from the Colossus Of The North will recognize certain habits. Thus, the tax of the government against the proprietors of business, coffee plantations, and cattle ranches, is meeting itself with the refusal universal of these rich ones by the policy "closed pockets," in the which no whatsoever taxes are paying themselves to the government.

Please yourselves to accept, Senores, my apologies most low for the lacking to answer hitherto to your letters and receive my sentiments elevated for the continuing with success of your affairs of the periodical, making reference most direct to the



"shorts," a word which uses itself in Costa Rica wishing to say uniquely underpants.

Your servant humble

—*Oliver H. P. Garrett*

WHODUNIT

The solution to the following is on page 129. It should take you a good deal less time than waiting to make a phone call in a railroad station ever did:

A man who had left his wallet in a telephone booth in a crowded railroad station noticed his loss a few minutes later and reported it to a policeman. Both went back to the booths immediately. There were four booths with a queue of people waiting in front of each. The policeman told the waiting people what had happened. They in turn asked the loser of the wallet in what booth he had lost it. The man was so confused, however, that he could not recall



which of the four booths he had been in. But several of the waiting people were suddenly able to give an exact description of the culprit. They were so certain about it that the police were able to seize the thief in the station waiting room.

What did the waiting people recall that enabled them to describe the thief?

—*Gerard Mosler*

NAVEL INTELLIGENCE

I liked teaching at the University of Hawaii, and I enjoyed my classes which were filled with young men and women of half a dozen nationalities. One of the most interesting of these groups



"Now you play the papa and I'll yell at you."

was the Americans of Japanese ancestry. What first struck me about them was a certain directness which permitted the use of words from which the *haole*, as white men are called, sometimes shrank. For example, there were the nurses who, assigned infor-

mal essays, wrote on such subjects as *My Patient Who Could Not Learn to Use the Bedpan*.

Such breaches of decorum were even more frequent with those who had come as exchange students from Japan itself. I well remember the day that Mr. Kazuo

Watanabe, assigned a five-minute talk, announced as his subject, *The Navel*. I thought I had misunderstood, and said, "Spell it, please."

"N-a-v-e-l," he enunciated clearly and launched into his speech. A more accurate title would have been *How to Read Character from the Shape of the Navel*, for he was into this intimate aspect of the subject that Watanabe carried us. He had read about it in a Japanese magazine and was obviously delighted with the information the article had laid bare.

"The navel is the best indicator of character," he announced. The fully developed personality expresses itself in a navel that is deep and smooth and round."

A loud laugh went up from the class. I wanted to stop Watanabe without hurting his feelings, but hated to seem a squeamish professor, and, frankly, his enthusiasm for the subject had aroused my own curiosity.

"Beware the man whose navel is long and thin and narrow, folded over like the eye of a potato!" he exclaimed dramatically.

The class roared. Watanabe, himself a tall, thin creature, showed his buck teeth in a smile of gratification, and warmed to his subject. Before he had finished, he had all but thrown open his shirt for the purposes of demonstration and had everyone thoroughly self-conscious.

After class, I drew him aside and explained that the information was interesting, but actually of only limited practical value in a country lacking the institution of the public bath. I suggested that he draw future topics exclusively from American magazines.

—Blake Clark

CO-OPERATIVE COMMUNITY

'47

Sirs:

I was much interested by Wallace Stegner's piece on co-operative home building in your April issue. To the projects he discussed add the one started a few months ago in Ramapo Township, Rockland County, only 32 miles from the center of New York City. It will occupy more than 100 acres of rolling farm land, with each home on a lot of from one to four acres at an average cost of \$7,000 per member. The land is being bought and developed co-operatively (including a central water system and roadways designed by the co-op itself), but each member will get clear title to his own site and will build his house on his own.

Skyview Acres, as it's called, may not be as elaborate as the Ladera, California, project described by Mr. Stegner, but it represents a similar step in the direction of throwing off a housing tradition that has proved "utterly incompetent" and putting in its place "some of the spirit that used to animate barn raisings when democracy was younger and simpler than it has become in our time."

Yours sincerely,

Peter Aymar

SOLUTION TO WHODUNIT

The thief had gone into the booth in order to make a call. When he saw the wallet he took it and left the booth immediately without making his call. This attracted the attention of the waiting people, who naturally gave a great deal of attention to the amount of time each person spent in the booth.

TWO YEARS DOWN THE



By S. J. Perelman

DRAIN

Illustrated by Jack Markow

ONE chilly evening last fall, over a bowl of vaporized Bourbon we were inhaling to ward off a cold, Walter O'Keefe, who played the dynamic industrialist in a musical called *Sweet Bye and Bye*, and I, who played the harassed librettist, began trading reminiscences of our experiences as war bond salesmen for the United States Treasury. Somewhat reluctantly—I had to drop a hat three times before I could get him to tell it—O'Keefe related the story of his arrival in a Midwestern metropolis to address what he supposed to be a medical convention.

The moment he set foot in the hotel lobby he realized that the Treasury Department had indulged in some loose thinking. It was, more exactly, a conclave of chiropodists; the lobby was decorated with a series of gigantic

plaster feet, adorned with surrealistic bunions and callouses done in luminous paint, each radiating convulsive little lines of pain. O'Keefe was promptly taken in hand by the chairman, a small, peppery character who hustled him into a banquet hall full of delegates noisily sipping consommé and ridiculing their patients' feet.

O'Keefe had hardly tucked his napkin into his collar when a fanfare rang through the hall and the chiropodists leaped to attention. A spotlight roved across the heads of the multitude and picked up, on a wall bracket, Old Glory rippling in the breeze of an electric fan. After a properly patriotic salute, O'Keefe and the chiropodists again attacked their meal, an interval largely given over to a long, unhappy account

whirlpool; yet often, in the melancholy hour which precedes the dawn, I still hear the sickening clang of the box-office window, shut forever, and the anguished cry of the composer as bankruptcy closed over his head.

They came from the four corners of the earth to play in *Sweet Bye and Bye*—lean, dyspeptic actors from the Southern stock companies, desiring no more than a bit of fat back, a hunk of corn pone, and \$900 a week; sonorous baritones out of the roadhouses of New Jersey, their ear canals deafened by the sound of their own bawling; muscular social directors off the borscht circuit, flatulent with overindulgence in the plays of Clifford Odets, steeped in the mannerisms if not the talent of Elia Kazan.

From the Barbizons, the Allertons, and the brownstones of Central Park West they came, the sopranos and the contraltos and the mezzos, with voices like the thrush and equal dramatic ability. When noses were finally counted, there were 48 in the cast, exclusive of the 26 musicians, the 55 stagehands, the dozen arrangers, linkboys, postilions and outriders, and the hierarchical production staff.

Welded into an entity by a congenital aversion to rising before eleven o'clock in the morning, they worshiped at many altars, held varying political creeds, but on one point they were unanimous—the incompetence of the authors. Though all else failed them, this was their rod and staff. You could wake any of them from deepest sleep (and their sleep was deepest at rehearsal), and back would come their unfaltering answer, "I could write a

better show with my hands tied behind my back."

NAT KARSON was a showman bred and born, but with the amount of detail he had taken upon his capable shoulders—producing, designing the costumes, staging, lighting—it was inevitable that he was not always available. He spent most of his time in the company of a little man whose official status was that of "procurer of materials." In reply to our question, Karson explained that this worthy was seeking strange, wonderful fabrics for the stage clothes.

The pair usually could be seen in some dim corner, whispering like schoolgirls and igniting a length of plastic string to test its resistance to fire. Who Karson's mysterious compadre was I'll never know, unless the insurance companies are now actively in show business. They might just as well be, considering what happened September 9 *et sequitur*.

WE CAME to the first day of rehearsal with high hearts—Ogden Nash, who had done the lyrics, Vernon Duke, who had confected the tunes, and Al Hirschfeld, the caricaturist of the *New York Times*, with whom I had written the book. We presented each other with five-cent cigars, indulged in horseplay like high-spirited shipping clerks, and generally gave free rein to our exultation. Obviously, the rest was a cinch; four weeks of rehearsal, a couple of profitable weeks on the road, and back to Broadway for a snug two-year run.

We made a few rough calculations on the back of an envelope; even by the most pessimistic eval-

situation, the movie rights couldn't bring less than \$3,000. Then, of course, there were the foreign rights, radio, television, royalties on the published play, sheet music, records. . . .

"Why, we're rich men," Nash breathed, his glasses misting over with emotion. We looked at him in admiration. How like a poet to have summed up, in a single sharp phrase, the essence of the situation! To express my appreciation of his valuable qualities, I proposed a novel plan. Let this day henceforward be known as Nash Day, to be given over to public feasting, morris dancing, and winebibbing. In years to come, when our show would be firmly entrenched as an American classic with a run twice that of *Oklahoma*, old men would remember that on September 9 *Sweet Bye and Bye* had begun its first week of rehearsal.

BY THE time *Sweet Bye and Bye* ended its first week of rehearsal, however, we had stopped exchanging cigars and were commencing to exchange worried glances. A number of curious little things had occurred, none of them serious enough to cause alarm, but sufficient to make everybody a little thoughtful.

For one thing, the leading man turned out to have a certain amount of difficulty with some of the songs which the composer considered his best efforts. The actor was extremely dubious whether he could project this type of music properly. His dark assertion that they could only be sung by a jackdaw was, of course, pure malevolence induced by overwork. The man pleaded acute laryngitis for a couple of days

and then threw in the towel. Duke, the composer, behaved with admirable calm as he removed from the score what he believed to be his three best songs; had somebody suddenly plunged a bread knife into his vitals, he could not have displayed less concern.

Almost simultaneously, the director became a problem. Kurt Conway gave me the impression of being an extremely serious, high-minded chap, who considered anything written since Ibsen's *Rosmersholm* and Hauptmann's *The Weavers* as frivolous. His association with a noisy, raffish entertainment full of putty-nosed comedians goosing showgirls embarrassed him visibly. The day when our soubrette's shoulder strap broke, and her bosom cascaded out like casabas rolling out of a crate, was Kurt's Calvary—or so it seemed to me.

He went white and I half expected him to be supported out by the stage manager. But it later appeared that his emotion was professional rather than moral. He maintained a dignified silence the rest of the day. Then, two days later, apropos of nothing, he remarked bitterly, "She did it on purpose."

IT WOULD require another James Joyce, laboring the same length of time it took to write *Ulysses*, to describe the events of the next few weeks. There was no more than the usual amount of jealousy and hatred among the personnel, which is to say that the intrigue was reminiscent of the Russian ballet. Throughout it all moved Karson, our producer, ever imperturbable, *toujours gai*.

There were times, indeed, when

I felt that anyone with less than nerves of steel would have crumpled under the strain, but Karson paced the quarter-deck like Nelson, always in command of the situation and as popular a captain as ever piloted a leaky, battered craft into a safe haven.

Perhaps the most disjointed afternoon I recall was the day before the show left for its out-of-town tryout. At one side of the darkened auditorium, Karson and the little clothier were, as usual, setting fire to string. On stage, the choreographer was busily polishing an elaborate dance routine of the sort once described by a friend of mine as "fire in a hook-shop."

"It's a ballet," he explained, "where the dancers act like a lot of dames running out of a notch joint when some drunk knocks down a Welsbach mantle." At rear stage, Conway and the actors were involved in a heated discussion. A player was supposed to bite into one of those flavor-some Jewish rolls known as *bagels*. The actor objected, however, that in the stress of performance, in working with a stale *bagel*, he might break a tooth. Instantly, all work was abandoned for three quarters of an hour; the prop man was summoned, and after long bickering, he was instructed to make a segment of the *bagel* removable.

Added to all this, of course, was the customary medley of rehearsal noises — the singing chorus in full cry, the stage manager scolding his assistants, the authors squabbling with the composer, and offstage, in her dressing room, the leading lady screaming the building down in a fit of pique.

For the full details of what took place during the next five weeks, you can consult the New Haven and Philadelphia newspapers—or, if you prefer, the remnant of hollow-cheeked actors bivouacked around Walgreen's in Times Square. It was a cataclysm, a descent into the abyss.

TO SAY that the critics slaughtered us would be prime understatement. They hung us in the pillory, decimated us, hunted us through the streets. The general tenor of the notices ran, "There may have been worse shows than this in the history of the theater, but I personally can't recall them." Not content with their original onslaught, the reviewers returned on Sunday to belabor the corpse. Without exception, they suggested that the authors embrace some other profession. One even sympathized with my wife, declaring that a marriage contract which chained a woman to an imbecile should be nullified.

And so, as the setting sun sinks over Cain's Warehouse we regretfully take leave of the dark continent known as Times Square, where every prospect pleases and only managers are vile. It was a charming experience, a gay interlude between sleep and waking.

To anybody who wants to write a musical comedy, I give my blessing and a word of advice. Just obtain for a few cents a 40-quart milk can, fill it partially with water, and suspend yourself in it upside down. It's called the Chinese Water Torture, and Harry Houdini used it for years. It's cheap, it's effective, and it beats writing plays all hollow. If you must get ulcers, why waste your whole life at it?



Mary Gibson

"Edward! Just where do you think you're going?"

DUBOS: NEMESIS OF T. B.?

At 45, the discoverer of tyrothricin goes all-out against his chosen enemy

By Yvonne Cooperman

IT WAS Louis Pasteur who said that "in medical science chance favors only the well prepared mind." It is another French scientist, René Jules Dubos, whose lucky chances and well prepared mind have pioneered research in antibiotics—the "miracle drugs" of newspaper headlines. The story of Dubos involves the entire development of antibiotics—the science of halting the action of the microbes of disease by using other microbes to destroy them.

THE young Frenchman's decision to come to the United States in 1924 was prompted by little more than "restlessness." His only assets were a diploma from the Agricultural College of Paris, a gift for persuasive speech, and a mind that had already impressed older scientists. A shipmate, Dr. Selman Waksman (who later discovered streptomycin) suggested that he continue his scientific studies at Rutgers University. To finance the advanced schooling he worked as a research assistant at the New Jersey Experimental Station for Agriculture. By 1927 he had obtained a doctorate in soil science and bacteriology.

Shortly thereafter, however, he talked himself into a real opportunity. During an International

Congress on Agriculture, Dr. Avery, of the Rockefeller Institute, mentioned a problem that had been hindering his work. Dr. Dubos offered the theory of antibiotic action as a possible solution. This got him a fellowship at the Rockefeller Institute. The particular problem was solved, and the work on "antibiotics" had begun in earnest.

THE theory behind antibiotic action is not new. It is well known that countless species of microbes can modify organic matter and eventually break it down. A few curious scientists near the end of the 19th century began to wonder about the fate of the millions of virulent microbes that were being buried with their human victims. They found that these agents of disease didn't live long underground, but soon fell prey to other microbes. It was plainly a case of "dog eat dog" down to the most minute forms of life.

Pasteur had pointed out as far back as 1877 that the anthrax bacillus which he injected into animals often failed to produce the desired disease if the solution was contaminated with "common bacteria." He even suggested that this could "perhaps justify great hopes from a therapeutic point of

ew." Other scientists have since observed that there are species of bacteria which are antagonistic to each other. But no attempt was made to forge this information into a weapon against disease until Dr. Dubos began his systematic search.

The problem Dr. Avery had presented at their first meeting involved the pneumococcus, the organism which causes pneumonia. Dr. Avery had already discovered that disease-causing pneumococci are surrounded by a starchlike capsule, whereas those not causing disease are not so protected. Dr. Avery had been trying to destroy this outer shell of the virulent microbe, but all the antiseptics available at that time destroyed the entire organism and proved nothing.

Dr. Dubos had suggested that another species of microbe could be found, probably in the soil, which would destroy the capsule without destroying the microbe itself. This proved to be the case. Dr. Dubos isolated a new bacterial species that could decompose the capsule (and only the capsule) of the pneumococcus. This proved beyond doubt that only the pneumococcus when protected by its capsule is dangerous, and that controlled antibiotic action had practical value. Dr. Dubos often calls himself "lucky," although he agrees with Pasteur about the well prepared mind.

DUBOS' discovery of tyrothricin, a powerful antiseptic drug and the main cause of his fame, came as the result of his microbe-hunting. In one experiment, he fed three major types of disease-causing bacteria (pneumococci, streptococci, and staphylococci) into a

soil mixture for about three months. He hoped the steady diet would develop a microbe with a taste for the harmful bacteria. At the end of this time, he placed a particle of the soil mixture under the microscope. He could actually see the three victims being vanquished by another species of microbe. This was found to be a common soil bacillus (later found also in sewage and cheese) yielding an antiseptic substance that Dr. Dubos named tyrothricin. To the three original victims were later added the bacteria which cause diphtheria, meningitis, and gonorrhea.

Unfortunately, the drug was found to have a poisonous effect on red blood cells and sperm cells. But since it did not damage any other type of body cells it has been used with remarkable success on leg ulcers, infected wounds, abscesses, and a variety of other infections including those encountered in war medicine and surgery.

SINCE the discovery of tyrothricin the world has been treated to the spectacular development of penicillin, the magical mold originally observed by Dr. Fleming, and the discovery of streptomycin and grisein by Dr. Waksman. Now there are thousands of workers engaged in a race to recover antibiotics from bacilli and molds in soil or other breeding places.

It would seem reasonable to expect that all this activity would find in Dr. Dubos its champion. But this would overlook the wide practical streak in his make-up.

Although he is certain that more and better antiseptic products from natural sources are available, Dr. Dubos deplors

many of the laboratory methods now being used in the search. He feels that because of the cost and time involved in animal experimentation many workers are relying too heavily on test tube shortcuts. The relationship of a parasite and its antagonist is so delicately balanced, he says, that an oversimplified approach will in the long run defeat its purpose.

He does not believe that finding a suitable antiseptic substance is an end in itself. Bacilli react to disease very much as we do. Just as a vaccination or inoculation sets up in our bodies a protecting reaction against a certain infection, so microorganisms strive to adjust to anything threatening their well-being, and may in time become immune to it.

Dr. Dubos was one of the first to sound a warning against too widespread a use of the sulfa and other antiseptic drugs, especially for prophylaxis, lest some disease-causing organisms eventually become resistant to these drugs. This theory became a sad reality when weak dosage against gonorrhea or some trivial ailment made the human body a medium in which the disease-causing microbes could alter their chemical make-up and evade the same drug in a later, more crucial test.

This happened not long after Dr. Dubos' warning. A virulent streptococcal infection raged through a service camp in which the personnel had been routinely dosed with sulfanamides as a prophylaxis against gonorrhea, a precautionary measure observed in every branch of the armed forces. However, it soon became apparent that the sulfa drugs, ordinarily highly effective against the streptococcus, were useless in

checking the epidemic, since the latter parasite had already had a chance to strengthen itself in a sulfanamide environment. Mass tragedy was averted only because penicillin was able to overcome the epidemic. But it has now been proved that penicillin or any other chemotherapeutic agent can by the same token initiate a similar drugfastness, so that newer drugs must be on hand.

At 45, Dubos is full of inexhaustible energy and enthusiasm for his work. Of all the research problems he has mapped for the future, the most important to him is the study of tuberculosis. It has been said that his interest in the disease began with the tragedy of watching his wife succumb to it, and that he had hoped to find in some phase of antibiotic action a means of saving her life. Actually, he felt the challenge of T.B. long before his wife's illness.

The first step was to speed up the growth of the tubercle bacilli in the laboratory. Dr. Dubos has obtained a good growth of tubercle bacilli in eleven to 15 days, (compared to several weeks by previous methods), and increased vastly the volume and quality of the cultures. His new techniques, now widely in use in the war against T.B., overcame the factors which prevented or delayed diagnosis of the disease and laboratory tests.

He hopes that it will now prove much simpler to go on to the study of the disease-causing power of the tubercle bacilli, to finding a cure, and most important, to establishing immunity. Judging from past performances, it would not be too surprising if he should realize all his hopes.



"So I says, you got nothing to complain about, I says, the things that happen in the mob you're working for, and she says, what things, and I says, listen, if you don't even know what things, then it's high time, and she says, . . ."

Philip Evergood

Modern, understandable, impassioned, compassionate: four adjectives for one of America's most interesting painters

By John Blomshield

WHEN New York's 57th Street opened its doors on a retrospective exhibition of 20 years of work by one of America's most discussed modernists, it put its final autocratic seal of approval on the career of Philip Evergood. It was one of the four outstanding episodes in the personal history of the artist.

The first of these occurred in Cambridge, England, in the early '20's. Born in New York, young Evergood had been sent abroad by his parents to study under the direction of his uncle, an engineer.

One spring morning, young Evergood stretched before his open window, overlooking the leafy campus, and wondered why he was not happy. Life at the University was lively and pleasant, his future seemed more secure than that of most young men. But he was filled with a purposeless, empty discontent.

That morning, instead of joining the crew for a workout on the river, he hurried—before the impulse should cool and he lose his courage—to the somber office of the head of Trinity College. There, stammering with embarrassment and fright, he declared his intention of renouncing college life and security to embrace the hazardous—if romantic—fortunes of an artist's career. A few weeks later he could have been found before his easel at the famous Slade School in London.

THE second episode, which took place a few years later, would do credit to a Hollywood scenario. The young artist lay dangerously ill in a New York hospital. He had only recently returned, exhausted from his work in Europe, to his home. Unknown to him, his mother had taken one of his still lifes, signed his name to it and



"TURMOIL" is a visual example of the development of Philip Evergood the painter. His technical mastery adds to the power of his social statement. The real slum stairway and the girl standing on it means less as composition or color, despite brilliance, than as Evergood's philosophy. He says: "It takes a Daumier to make a plutocrat crave to possess a painting which is a searing indictment of his class . . . time and death are certain to contribute to the artist's powers of seduction."

quietly sent it to the jury of the National Academy. The painting was accepted.

The surprise and excitement of finding his work hung among the great names of the art world proved a tonic that soon took the young painter out of his bed.

It has always been a deep sorrow to the artist that his mother did not live to enjoy the success of his first one-man show. This third event took place 20 years ago at the Dudensing Gallery, famous for pioneer work in modern American painting.

THE rhetoric of bewildered critics still smarting from the bad guesses on the work of the earlier modernists—and the enthusiasm of the intellectuals are now history. In the following years honors by the score and very substantial money prizes came his

way. Only recently he received the \$1500 La Tausca Award for painting.

After that first feverish year at the Slade School of Art, mastering the elements of drawing, Evergood returned to New York to study painting under George



SOLOMON AT THE COURT OF SHEBA is from Evergood's 1929 period, emphasizing color and solidity.



PORTRAIT OF MY MOTHER shows how a painter's feelings are more important than prettiness.



PHILIP EVERGOOD'S self portrait shows a man who was unhappy as a University student at Cambridge, who forced his way to mastery of palette, brush, color, form—and then began to say something as an artist and as a citizen of the world in which he lives. His techniques and his statements of social insight have been equal targets for attacks, criticism, and praise.

Luks, an artist whose greatness has never been fully recognized. Paris followed.

In the studios and over the café tables of Paris he became acquainted with many of the famous French artists of the day, but he never fell under their complete domination. He never became a slave of the transient fads filling the modernist galleries of Paris.

A trip through Italy brought him in contact with the rich humanist sources of the Renaissance. Tintoretto is a name he reveres, and there are traces of the Italian influence in the basic approach to his work.

The critics have always written of Evergood as a humanist. This designation seems a fundamental error. For our purposes a *humanist* is one who loves man in his nobility; a *humanitarian* is one who loves him in his degradation. And Evergood, in his painting and in his life, is always fighting on the side of the poor, the oppressed, the unhappy. He is a hater of fascism in all its subtle forms, of power abused.

A glance at some of his titles would prove this: *Mine Disaster*; *Railroad Men's Wives*; *Jobs, Not Dimes*, are a few.

The mention of Abstractionism to Evergood evokes some of that terrifying fire usually reserved for fascism. Abstractionism, he declared in a recent lecture, is a form of shorthand with a message for the few, if for anyone. It is an incomplete mode of expression, and is too often the refuge of the incompetent painter.

One might consider the portrait of the artist's mother here reproduced as his rebuke to Ab-

stractionism and perhaps his most lyrical painting. It has been painted with a caressing brush, the head gently modeled, the soft hair a glowing copper, the whole canvas resonant with warmly vibrant color. This work, completely lacking in sentimentality, was completed over the extensive period of 19 years.

INTELLECTUAL, but passionately humanitarian, describes the man, as it does his work. He bellows, but with a soft voice. His chubby, deceptively youthful face passes quickly from a serious frown to a smile at a flash of humor.

He is a charming talker and is often sought for the lecture platform. In private debate he is formidable. He begins with a winning voice. As the argument grows his expression becomes more intense, his voice deepens, and he seems to expand in size. Finally, you are cornered and helpless, more by personality and physical presence than by any persuasive logic.

Evergood met the pretty dancer, Julia (Juju) Cross, who appears in many of his paintings, while he was a student in Paris. After a romance, pursued during several Atlantic crossings, they were wed in New York in 1931.

ONCE, perhaps, Philip Evergood was a storm center of modernism. But when modernism is sincere and good it becomes familiar material in time; people will understand good work, no matter how long the process of learning may be. With Evergood, the time has matured; he is known and he is liked by thousands who at first might have thought his work strange.



BEETHOVEN

OF BEALE STREET

American music owes a debt to 73-year-old W. C. Handy, the
father of his country's blues

By J. D. Ratcliff

EVEN Horatio Alger would have had difficulty getting one of his heroes from a dirt-floored cabin in Alabama to Carnegie Hall in New York. It is even more doubtful that he could have pulled it off if his hero had been a Negro, born of slave parents. But William Christopher Handy has successfully negotiated this rocky road, managing to create a new music form along the way.

Handy wrote *St. Louis Blues*, one of the most popular pieces of American music ever written. There are over 300 recordings of it, and it is played thousands of times each year over the radio. To a great degree, it is what the rest of the world is thinking about when it speaks of American music. A recording by a Japanese

orchestra was found in a cave at Iwo Jima. Certainly the oddest rendition of *St. Louis Blues* ever made was by Scottish pipers at Balmoral Castle—at the request of the present Duke of Windsor, who was then Prince of Wales.

Handy also wrote *Memphis Blues*, a song which helped create the political dynasty of Boss Ed Crump, iron-fisted monarch of Tennessee democracy. The aspiring young politician from Holly Springs, Mississippi, was running for mayor of Memphis in 1909. His managers wanted a campaign piece and Handy obliged with *Memphis Blues*. Crump belatedly paid off the debt due for this service when, in 1931, he had a small Memphis park renamed Handy Park.

Handy also wrote *Beale Street Blues*, *Yellow Dog Blues*, *Joe Turner Blues*, and the magnificent *Aunt Hagar's Children Blues*, which is rarely played today. Besides a score of blues songs, he

Gjon Mili's photograph of W. C. Handy shows a man past 70, partially blind, yet still as much a part of the music of today as his own *St. Louis* and *Memphis Blues*.

has written an equal number of spirituals and several military marches. He is now at work completing the symphony, *Blue Destiny*, left unfinished by Alberte Chiaffarelli when he died in 1945.

The argument is frequently proposed that no one created the blues; that they are folk music as old as the Negro race. But until Handy came along it never occurred to anyone to formalize and record the laments of the cotton picker, the road worker's song to his hammer, the chants that eased the labors of the Mississippi stevedore. Even the *Encyclopedia Britannica* concedes that Handy is the father of the blues.

Handy's life hasn't been a straight-line graph from bottom to top. Generous with money and casual about business details, he had been on the financial rocks enough times to send half a dozen distraught brokers rushing for open windows. He has slept, shirtless and penniless, on the hard cobblestones of the St. Louis levee and gone on to live in a plush Stanford White house in Harlem's Striver's Row. He has paved streets at Evansville, Indiana, for 75 cents a day and gone on to an expensive car and a chauffeur.

Now, at 73, such fluctuations in personal fortune seem to be behind him. He has a comfortable house in Yonkers, a New York suburb. His music yields generous royalties. *St. Louis Blues* produces an average of \$25,000 a year; and one recent recording of *Memphis Blues* brought in \$5,000. In addition, there are profits from Handy Brothers Music Company which publishes about a dozen pieces of popular music a year.

W. C. Handy, the father of the blues, was born at Florence, Alabama, November 16, 1873. His father was pastor of the Negro Methodist Church in the little town, which is near the Muscle Shoals of the Tennessee River. As a boy, his life was pretty much that of any other colored boy in a small southern town. He picked berries in the summer and gathered chestnuts in the fall—to be sold from house to house along with a crude soap which he made. He picked cotton, did odd jobs, and swept out the courthouse.

Interest in music was born when a stranded circus left a band leader behind in Florence. Hungry and broke, the white man took the only job he could find—coaching the local Negro band which rehearsed in the back of a barbershop. A worshipful Handy became a kind of unofficial mascot of the band—serving freely and generously for the privilege of occasionally handling a brass horn. Eventually he saved enough—\$1.50—to buy an ancient rotary valve cornet.

His father reacted violently to the purchase. A grimly religious man, he contended that music was the work of the devil, unless it happened to be church music. He would rather, he said, see his son in a hearse than in a band.

So far as young Handy was concerned, this settled the matter. He had no intention of following his father's footsteps into the pulpit. He hopped a freight train to Birmingham.

He got a job in the Harrison-Howard Iron Works and in his spare time organized a four-piece orchestra. He proposed taking the orchestra to the Columbian Exposition in Chicago, originally

announced for 1892. Handy and the band climbed aboard a north-bound freight train. None of the boys had ever heard that hoboes were supposed to travel light. They had suitcases with all of their belongings, as well as instrument cases.

It took three weeks to reach Chicago, with way stops to make enough money to eat. Disaster was waiting for them. The fair had been postponed a year because of depression. Hunger was on the land. There were bread lines and job riots. General Coxey was preparing his army for his first march on Washington.

Homeless and friendless, Handy's band picked up a few nickels playing on sidewalks and in saloons. But it was hopeless and he knew it. The band broke up and Handy hopped a freight for St. Louis.

Homesick and hungry, Handy slept on the levee. Years later, when he wrote *St. Louis Blues*, the opening line read:

*I hate to see the evening sun go down . . . **

Anyone would hate to see the evening sun go down when the waiting bed was made of granite paving blocks.

Handy attaches an enormous amount of importance to this period in St. Louis. Mournful chants of Negro freight handlers, expressing all the misery in the bones of his race, took on new meaning. He was learning things he could never have learned in the parsonage in Florence.

*Copyright W. C. Handy 1914

He moved on to Evansville, Indiana—simply because there were more freights going that way. He landed a street-paving job and, after a few weeks, a job with the local Negro band.

He played in bands all through the South and Midwest. With Mahara's Colored Minstrels, he marched in parades, played the bull fiddle in the pit, and gave a cornet solo on the stage. In 1905 he struck Memphis, the town with which he was henceforth to be identified.



IN HIS travels, Handy had stored up a vast musical lore. Negroes sang about everything: trains, steamboats, sledge hammers, fast women, mean bosses, and stub-

born mules. Most of these songs were in the basic blues pattern—a slow drag, then a repeat. Handy's sensitive ear caught their pattern, and a retentive mind preserved them.

Memphis, the new Handy home, was the hottest town in the South—particularly from the Negro's point of view. Beale Street was the South's black Broadway: a noisy assortment of saloons, pool-rooms, fried fish stands, chattering joints, and dance halls.

Starting as coach for a small band, Handy soon had 60 musicians working for him. At \$3 per man, he could furnish bands of almost any size. The South liked music for any and all occasions—barbecues, real-estate sales, cooking contests, steamboat excursions. Bands were hired to open new grocery stores even be-

fore canned goods were on the shelves. Handy supplied the demand, picking up some odd engagements in the process.

One night Handy was playing for a dance at Cleveland, Mississippi, a disheveled little town in the heart of the Delta cotton country. One of the dance's sponsors asked if he minded if a local band had a turn. Handy didn't. Three sorry looking musicians filed in, one with a battered mandolin, the second with a splintery guitar, the third with a patched-up bass fiddle. Handy had been playing formal dance music. This pick-up band broke out with red-hot jazz, improvising as it went. When it finished there was a shower of silver dollars.

If people wanted that kind of music, Handy decided, he was the one to give it to them. That night the blues were born.

He was ready to put his new ideas to work when Crump's campaign managers approached him about writing a song to boost their candidate. In its original version, this song had no words—except those written for the edification of Beale Street. Crump was running on a reform ticket, promising to close saloons, gambling houses, and the red-light district—such reform being about as popular on Beale Street as a smallpox epidemic.

Handy's original lyrics to the song took this into consideration. They ran:

Mister Crump won't 'low no easy riders here,

Mister Crump won't 'low no easy riders here.

We don't care what Mister Crump don't 'low,

We gon' to bar'l-house any-how . . ."

*Mister Crump can go catch his-self some air!**

An easy rider—in case the expression is new to you—is a Negro catch-all phrase which includes procurers and various kinds of loafers and sharpers.

Loaded in a wagon, a Handy band consisting of violin, guitar, string bass, clarinet, saxophone, trombone, and trumpet jogged through Memphis streets, playing the piece then called *Mr. Crump*. It was a spectacular hit. Apparently, Crump took no offense at the suggestion that he catch himself some air. The song got votes.

Despite its local popularity, *Memphis Blues* made little headway in other parts of the country. After it was published in 1912 it sold so few copies that Handy let his rights go for \$100. In the 28 years that this copyright ran, the song netted its purchasers several hundred thousand dollars. However, the copyright reverted to Handy in 1940.

This song set the blues pattern, paved the way for the hundreds that came from the pen of Handy as well as other composers. In 1913 he followed it with *Jogo Blues*; and in 1914 with *Yellow Dog Blues* and *St. Louis Blues*. He had the form of *St. Louis Blues* worked out in his head before he hired a room on Beale Street in which to write it.

Handy's lyrics are notable chiefly for the Negro vernacular employed. In many cases words and phrases are foreign to white people. Thus, monkey man for West Indian Negro; hinkty (old-time darkey); dicty (uppish); and such phrases as "on the hog" (broke); Aunt Hagar's children (Negroes); and "vamp it" (walk).

*Copyright W. C. Handy 1912

He spends his mornings listening to the radio and usually goes to his New York office in the afternoon. His wife is dead and



Handy still has one unfulfilled ambition. He would like to organize an old-time minstrel show and give it a New York production. He would lead the parade himself—down Broadway at high noon.

WORLD SHOWMAN

By Frederick G. Brownell

A big man from a small country is Trygve Lie, one of your planet's top officials. The Secretary General of the United Nations believes in people, peace, and the health of the world. He's worth meeting.

ONE of the chief thrills of any circus lies in the knowledge that the animals may break loose and make a meal of the performers. At the United Nations carnival the thrill is proportionately greater; for if the animals do break out, it's the spectators who are going to be gobbled. That is, you and me.

Trygve Lie presides over this four-ring spectacle with all the aplomb of a born showman. This ham-fisted, bull-voiced Norwegian labor leader is just completing his first year as Secretary General of the United Nations and as a resident of the United States. Lie—the surname is pronounced *Lee*, as in Virginia—is still unknown to a majority of Americans. He is a good man for us to get acquainted with. On his efforts, in no small measure, depends the success or failure of the world show.

Fifty-five countries, ranging from tiny Luxemburg to gigantic Russia, make up the United

Nations. They comprise seven tenths of the land area of the globe and include four out of five of its inhabitants. As secretary of their club, Trygve Lie is the closest thing to a world manager that we've yet achieved. If the UN experiment succeeds, he will be in line for the most powerful job on earth; if it fails and another war ensues, nothing else much matters.

Unlike Douglas MacArthur, Billy Rose, and other noted impresarios, Lie shuns personal publicity. He makes no speeches, grants few interviews, declines to lend his name even to such worthy causes as the American Red Cross.

Lie looks and acts in public like Edward Arnold, of the movies, impersonating a Wall Street financier. However, in private conversation at Lake Success I found him informal, direct, and friendly.

A loudspeaker in one corner of his office gave forth the proceedings of the Economic and Social



ROSENTHAL-PLX

TRYGVE LIE'S first name means "one who is very sure of himself."

Council. A delegate was maundering in cultured British accents about the folly of not doing business with Franco. Lie switched the gadget off.

"He talks too much," he growled disgustedly. "Been going on like that since 10:30 this morning!"

ALTHOUGH he realizes that statesmen have to air their views, the Secretary General believes in knowing when to stop. He takes a workmanlike pride in the smooth functioning of the UN

machinery of which he was one of the principal designers.

In Norwegian "Trygve" means "one who is very sure of himself." The name fits him like his hat. Lie detests yes men. He seeks advice, but, nevertheless, makes his own decisions.

Although occasionally given to snap judgments, he debated with himself all night before deciding to intervene in the Iranian dispute. An associate described him to me as "the stubbornest man alive. If he's made up his mind, hell itself can't budge him."

He's also stubborn about putting off decisions until his mind is thoroughly made up. If a subordinate tries to press the issue, he will change the subject by demanding, "Caught any big fish lately?" or "Tell me the name of a good restaurant."

What others call stubbornness Lie himself considers merely patience. "I can wait," he often remarks. In the behind-the-scenes battles which accompanied the setting up of the United Nations this patient stubbornness repeatedly paid off. Sometimes, though, his patience wears thin and he explodes in rages, during which fierce Scandinavian oaths roll from his lips like thunder in the fjords. But it's over in a moment. He has never been known to hold a grudge.

Trygve Lie derives his wide powers directly from the United Nations Charter. He can be re-appointed, but may not be removed. His job is one to tax the resources of a seasoned politician and to drive a business executive completely wacky. As Secretary General he is responsible for the well-oiled functioning of the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the various subsidiary bodies.

In addition, he is supposed to co-ordinate the activities of a dozen independent outfits already set up or now in the process of formation. These are the so-called "specialized agencies" of the United Nations whose abbreviated names—ILO, UNESCO, and the like—appearing in the newspapers suggest brands of breakfast cereal rather than top-rank international bodies.

AMONG individuals, Lie alone enjoys the right of calling to the attention of the Security Council (and the General Assembly) threats to international peace occurring anywhere on earth. In this respect he is the equal of a sovereign member government. Within his own sphere—the secretariat—he wields more power than the President of the United States.

He has carte blanche to select his own assistants and decide how much they should be paid. His appointments are not subject to confirmation by the General Assembly or any other body.

His many employes speak a Babel of different languages; but English is their lingua franca. All are international civil servants, sworn "in all loyalty, discretion, and conscience" to discharge the functions entrusted to them with the interests of the United Nations only in view, and not to "seek or accept" instructions in regard to the performance of those duties from any government or outside agency.

LIE and his wife and two younger daughters occupy a 12-room residence in Forest Hills, Long Island. It is leased and paid for by the United Nations. He is driven to and from Lake Success in an official green Cadillac piloted by a chauffeur on the UN pay roll. He gets a salary of \$20,000, plus a "representation allowance" (i.e., entertainment fund) of \$20,000 more. His total take thus is \$40,000. Since this entire amount is income-tax free, he is approximately as well off as an American businessman making \$120,000.

The Secretary General's office, on the second floor of the former

Sperry administration building, is simply but tastefully furnished in modern style in tones of brown and green. At nine o'clock each morning Lie holds a sort of cabinet meeting, attended by the eight assistant secretaries general of as many different nationalities who head the eight departments of the secretariat. Also present are such close associates as Andrew Cordier, chief executive officer and former Washington economist; Thor Gjesdal, blond, Norwegian director of public information; Abe Feller, general counsel and erstwhile Harvard law professor; Brian Urquhart, special adviser and one-time British civil servant; Colonel Alfred Roscher-Lund, during the war Norway's most successful spy and saboteur, now Lie's deputy at meetings of the Military Staff Committee; David Vaughan, director of conference and general services; and Bill Stoneman, famous foreign correspondent who acts as his press secretary.

At noon, unless he's expected to play host to visiting bigwigs at the United Nations guest house, Lie likes to go home for lunch and a postprandial nap. He gets back about 2:30, bursting with renewed energy for a series of conferences which he spaces at 15-minute intervals as long as there remain problems to be settled. When the pressure is great, this may occupy him up to midnight or even later.

In his study at Forest Hills there's a second loudspeaker. This is hooked up, like the one in his office, to the United Nations public-address system. The telephone by his bed is connected

with the United Nations switchboard, which is kept open 24 hours a day. Aides have grown accustomed to being wakened by a call from the boss at 3 A.M. about something he wants them to attend to "right away."

Lie is a born fighter, and he likes nothing better than to take on an antagonist bigger than himself. In the Security Council he has on occasion opposed the combined American, British, and Russian delegations—and won his point. However, as a sound political tactician he favors enveloping movements rather than frontal assaults.

His favorite proverb, "A snuffbox has many sides," is the Norwegian equivalent of, "There's more than one way to skin a cat." By displays of forthright courage combined with smart maneuvering he has managed greatly to enhance the power of the Secretary General's office, confounding dopesters who had expected him to act as no more than a glorified errand boy.

An utter extrovert, Lie enjoys the noise and bustle of big-city life. He feels most at home when jostled by Manhattan's crowds, and was from the start a behind-the-scenes booster for locating the permanent home of the United Nations within shouting distance of Broadway.

Intensely interested in people, he quizzes waiters, barbers, gas station attendants about their intimate affairs. Returning not long ago from a week-end visit to the Vermont home of Warren Austin, America's chief delegate, Lie's plane was grounded at Albany. Chartering a taxi, he invited two stranded airline passengers—a man and a woman—

to share the ride to New York. In one sense they paid for the trip, for he plied them with questions all the way. After dropping one of his guests in The Bronx, the other in Manhattan, Lie arrived home at 2 A.M.—tired but happy in the possession of a fresh slant on the great American public.

A FAMILY man, Lie likes best of all an evening of music, dancing, and general festivity in his own home, surrounded by his wife and his attractive teen-age daughters, Guri and Mette, and a dozen or so young people they have asked in.

Before the war Lie secretly supported a large group of relatives out of his meager earnings as a labor lawyer; today he is known to New York restaurants as a check-grabber and a heavy tipper. However, he also has a keen sense of the value of a dollar. The night of the most recent Louis fight one of his guests found a \$1 bill underneath his ringside seat and jocularly handed it to the Secretary General. Lie pocketed it without comment. At Lake Success he continually embarrasses delegates by button-holing them in the corridor and loudly demanding: "Your country still owes us \$33,560; when are we going to get it?"

TRYGVE has been a champion of the world's plain people for as long as he can remember. He is the son of working-class parents and was born in Oslo on July 16, 1896. His father, a carpenter, disappeared—presumably to seek his fortune in America—when Trygve was just six. After that, his mother took in boarders to

support herself and her small son.

Trygve worked his way through school and college as office boy in the Oslo headquarters of the Norwegian Labor Party.

Young Trygve made his official entry into politics at 16 by being elected president of the Labor Party branch in suburban Grorud. He held the job for seven years. On his graduation from the university law school he was made secretary of the Oslo unit.

At 25 he was named a member of the Norwegian Labor Delegation that was being sent to Moscow. He had just married apple-cheeked Hiordis Jorgensen, daughter of the Grorud station-master. He took his bride along. The next year he was appointed legal adviser to the Labor Party and at 30 rose to be a member of its national council. When Norway's second Socialist government took office in 1935, he found himself in the post of Minister of Justice. As such he kept disputes between workers and employers from getting out of bounds.

EARLY in 1939, with war clouds lowering over all of Europe, Lie was placed in charge of the newly created Ministry of Shipping and Supply. In a few short months he accomplished such a miracle of stock-piling necessities that, despite German plundering, Norwegians remained the best-fed and best-clothed of Europe's belligerents up to the war's end.

In the desperate days when Norway was being overrun by treachery and force, it was he who broadcast the orders to Norwegian ship captains that kept the world's second-largest merchant marine out of Nazi hands. Escaping to England with King

Haakon, he became Foreign Minister of the Norwegian Government-in-exile.

Lie visited America twice during the war. In 1945 he attended the San Francisco Conference, which set up the United Nations. He was, later, serving as a delegate to the first session of the General Assembly in London when elected to his present job.

HE is a confirmed internationalist and he has fought big-power dictatorship of the United Nations from the beginning. He has opposed with equal vigor the formation of a bloc of small countries as a balance of power. And he has done much to narrow the fissure between East and West.

"Lie's not pro-American or pro-British or even pro-Norwegian," a veteran newsman who has covered the United Nations from the start said to me. "He's simply pro-Peace and pro-Human Race."

FINAL judgment on Lie's qualities as an impresario will have to wait awhile. However, I found it encouraging that after he had been in office almost a year, every delegate with whom I talked still considered him by all odds the best choice for the job. Rumors that his resignation would be cheered "from Washington to Moscow" were attributable to a handful of disgruntled ex-employees whom he forced out of the secretariat for good cause.

"No genius, but a damn fine specimen of a human being—with a special talent for leadership and conciliation," is the way one described him.

Lie remains supremely confident as to the future of the United Nations as a whole. He ex-

pects the veto question to solve itself in precisely the same way as it did in Norwegian history—through the gradual voluntary relinquishment of the veto power as the five big nations in the Security Council come to realize the



need for working with, rather than against, each other.

"The United Nations," Lie told me, "isn't a negative institution, charged merely with seeing to it that there won't be a war. Its aim, like that of a doctor, is to keep the world well. The United Nations must undertake a vast amount of solid, long-term work in the fields of economic and social reconstruction throughout the world."

However, the Secretary General doesn't expect Utopia to be created overnight.

He insists: "This task—to make life richer for ordinary human beings everywhere—must occupy us throughout our lifetimes; and it will occupy those who follow us in time to come. But the harder the task, the higher the prize. It is the future of the civilized world that is at stake."

Other People

THE GLUTTON OF VITI LEVU

The custom of man-eating in the Fiji Islands has now entirely disappeared. Less than a century ago, however, a record in cannibalism was established, which probably now will stand for all time. Ra (Chief) Undreundre, of the district of Rakiraki on the Island of Viti Levu, became so selfish a gourmand of human flesh that he declined to share his meat course at his two daily banquets with any friends or relatives.



Unfinished portions were carefully cherished in cool leaves and recooked again and again so that nothing was wasted. Ra Undreundre was not sufficiently curious to keep an accurate count of his victims until he was well into middle age. The tally of the men and women he personally devoured from then until the end of his long life, on the recorded testimony of contemporaries, ultimately reached 872.

—John W. Vandercook

THE ANATOMY OF BOREDOM

A certain pilot of the Naval Air Transport Service in the Pacific came to be known, during the

war, as "Good Luck" Gus. Nothing ever went wrong for him.

Gus had joined the Navy with some sense of responsibility toward his country, and although he was not so rash as to wish for engine trouble, or for contact with enemy planes, he did feel that the weather might be kind enough to be bad enough, once in a while, to give him a slight feeling that perhaps he was fighting a tough war.

But it never was. The sun and the stars always shone. Prevailing winds reversed themselves and favored him. If ever a cloud appeared while he was flying, it would hang high in the east and serve as a huge white reflector for the setting sun, brightening the end of day, so that Gus could land his plane the easier.

Finally, one day, on a flight from Kwajalein to Guam, at about 11,000 feet, in his usual perfect weather, with all engines purring beautifully, Gus became desperate about the dullness of his war and decided to do something. He was not so bored as to make up his mind to apply for combat duty; he just decided to let off steam by playing a practical joke on his passengers.

At the time, the passengers, well pleased with the superb flying conditions, were reading, dozing, munching sandwiches, or looking out the windows at the broad, calm ocean. Four were playing cards on a board rigged across the aisles.

All of a sudden, the door to the pilots' compartment up forward sprung open. For an instant Gus stood in the doorway, with a look of alarm on his face. He then started running down the aisle, leaped over the card table, rushed to the very back of the plane, picked up four yellow rubber lifejackets, ran up the aisle, hurdled the card table again, dashed through the pilots' door, and slammed it shut behind him.

That was all. Gus did not even go back to see whether his stunt had startled the passengers. He found out later that it had, all right—enough so that when the plane arrived at Guam, of course without mishap, the passengers, unable to find Gus, paraded wan and weak-kneed into the operations office to find out what in the world had happened.

After an investigation, Gus was ordered back to the United States and a desk.

—John Hersey

■ THE SIMPLE JOYS OF TEACHING

Some years ago—I'm sure they order these things better now—I had occasion to visit the kindergarten class of a highly progressive school. The tots were engaged in what I believe is termed rhythmic play. They were following the lead of their teacher, an energetic young woman, who danced and marched about the room clapping her hands in time to the music of a phonograph record.

The docile pupils straggled along behind her in somewhat ragged formation. After the rhythmic play was over, I drew one five-year-old aside—his countenance had seemed particularly knowing and stoical—and said: "I guess you have lots of fun doing that, don't you?"

He turned his face up to me and replied, with philosophic resignation: "No we don't, but"—he pointed to the teacher—"she does."

—Clifton Fadiman

SWEEPING WENDY: STUDY IN FUGUE

Wendy put her black eyes on me

and swept me with her black eyes—

sweep on sweep she swept me.

Have you ever seen Wendy?

Have you ever seen her sweep

Keeping her black eyes on you

keeping you eyeswept?

—Carl Sandburg

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George Biddle's "I'm Gwine ta Sing" is part of the story of American FOLKLORE ON CANVAS. See pages 81-86 for other great paintings.